

Money and Banking

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THIRD EDITION

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TO
JOHN T. MADDEN

Preface to the Third Edition

World War II caused many changes in the field of banking. While most of these changes were quantitative, a few were qualitative. The authors are indeed happy, and perhaps fortunate, to record that none of the established principles of money and banking set forth in the previous editions has been invalidated in the recent cataclysm of global war.

In this revision, the text has been brought up to date as far as possible. In most factual material, it has been brought up to early 1946 and in many instances as far as July, 1946.

The authors desire to record their indebtedness to colleagues at New York University and many other universities and colleges where the text is used for valuable suggestions and assistance in making it more serviceable in the classroom. In particular, the assistance and practical experience of Doctor Sipa I. Heller has been of immeasurable value to us.

THE AUTHORS

Preface to the Revised Edition

In this Revised Edition, the text has been brought up to date as far as possible, mainly to the spring of 1940. While political and economic disturbances throughout the world may affect the factual data contained in any current work in the field of money and banking, they will not invalidate such principles as have been established. Violations of sound principle will, in the long run, serve only as further proof of the principle.

In recognition of the increased importance of the investment function in commercial banks, and because of the growing need for credit control, a chapter in each of these fields has been added.

The opportunity has also been taken to rearrange subject matter along lines which classroom experience has indicated to be desirable. In this connection and in many other ways, the authors are indebted for helpful suggestions to numerous teachers who have used the earlier edition as a text in their classes.

THE AUTHORS

Preface to the First Edition

The first requirement of a text is that it present clearly the fundamentals of the subject. The next, and equally important, requirement is that it impress these fundamentals, by historical and current practical illustrations, upon the student's mind. It is hoped that both these requirements have been met.

The pedagogical and practical value of the present volume has been enhanced by review questions and problems at the end of each chapter.

While the text is intended primarily for a full-year course, it can be adapted to a one-term course by eliminating certain chapters, such as those on noncommercial banking.

Since the text is the joint product of four authors who have expressed their individual viewpoints on their respective subjects, the authorship of each chapter is indicated by the initials of the author at the end of that chapter.

The authors acknowledge, with thanks, their indebtedness to numerous associates, students, and friends who have in various ways contributed to the preparation of the manuscript. Among them are Edward H. Bishara, Gaines T. Cartinhour, S. I. Heller, Harold C. Knapp, Marie D. Kohlerman, Howard Rumpf, and Bertha Toepel, of the staff of the School of Commerce, Accounts and Finance of New York University.

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Money and Banking

CHAPTER 1

Money and Credit

Barter. Man has never been able to make with his own hands all the things his heart desired. Even the most primitive savage tried by stealth or force to get the things he could not or did not produce for himself. The first rudiments of intelligence showed him the advantages of trade. First by chance, and later by design, some men produced or acquired more of certain things than they needed for their own use. Then one man, having a surplus of fish and a need for skins, would seek out another who had a need for fish and a surplus of skins and exchange with him.

This direct exchange of one commodity for another commodity, other than money, we call barter. It is an inconvenient and time-consuming method of trade, for it requires a double coincidence of demand. A man having one thing to trade must find another who both wants that thing and has something acceptable to offer in exchange. Further, the two things to be exchanged may be of unequal value, so that one man must offer something to boot which will be acceptable to the other, and this causes further difficulty.

Barter still prevails among backward peoples, and its kinsman, payment-in-kind, is also widely in use among them. Nor are these methods of exchange entirely unknown to the modern business world. A large percentage of new automobiles is paid for in part by "trading-in" used cars, with money or credit used to pay the difference. Such partial barter transactions are common in many lines of business. Labor, especially on the farm, is frequently paid for with food, shelter, and clothing, and the practice of paying farm rent with a share of the crop is common.

The advanced business community of today normally relegates pure barter to a rôle of comparative unimportance. Any large increase in barter in our time is an atavism, produced by mismanagement of facilities which civilization has developed through countless generations and given us in trust for the future. It is obvious that only a small fraction of modern commerce could be sustained if barter were to become the sole method of trading.

Early mediums of exchange. In the earliest communities it soon developed that some one thing was used or desired by nearly everyone, and was also generally available, although in limited quantities. This commodity became the standard measure by which other things were compared in bartering. It was also exchanged directly for other things and was held as a store of purchasing power, with assurance that it could later be exchanged for other commodities as they were needed. Thus it came to serve a three-fold purpose: it was a standard unit of barter, it was a medium of exchange, and it was a store of purchasing power against future need.

What particular commodity would be chosen as a standard unit of barter or medium of exchange in any given community depended upon various factors, such as location of the community, climate, and cultural development. Thus, people living by the sea chose shells or fish-hooks as a medium of exchange. In cold regions, skins and furs were universally needed for clothing, and so were used as a medium of exchange. Tropical tribes, having little need for clothing and being lavishly supplied with food by Nature, were able to concentrate their lazy efforts mainly upon the gratification of the universal craving of man for personal adornment. Beads of shell and turquoise; teeth of the whale, the shark, and the porpoise; the brilliant plumage of tropical birds; elephant tusks, tiger claws; implements of war and the chase—all these were widely desired as ornaments, and most of them have been used as mediums of exchange in one tropical region or another. As men progressed in wealth and culture their desires changed, and different commodities became mediums of exchange.

Shells. Cowry shells, taken from the shallows of the Indian Ocean and pierced for stringing, were used for centuries as a medium of exchange among the islands of the Indian Ocean and the South Seas, on the West Coast of Africa, and in the southern and southeastern parts of Asia. Cowries were found in the ruins of Nineveh; Marco Polo reported that porcelain shells were imported

into the province of Yunnan and used for small change; *Ya-King*, the oldest book of China, mentions cowries and tortoise shells; and they are still used as a medium of exchange in isolated parts of India, on the West Coast of Africa, and in the South Seas. The wampum beads of the North American Indian are familiar to every schoolboy. Dentalium shells were used by the Indians of California.

Oxen. After man tamed the ox and the sheep and progressed to the pastoral stage of development, his property consisted mainly of his herds. Cattle and sheep provided him with food and clothing, and, in case of need, even with cover for his tent. Throughout most of the temperate zone of Europe, Asia, and Africa, the unit of the herd—the cow—became the standard unit of barter.

A scale of physician's fees appearing in the Zend Avesta of ancient Persia listed the ox, the cow, the sheep, a meal of meat. According to Aristotle, the cow was the unit employed by Dionysius in assessing taxes upon the people of Syracuse. Down to the fourth century B.C., Roman fines were levied in cows and sheep. In the Homeric poems, probably written in the ninth century B.C., values were expressed in oxen; 1700 years later, Charlemagne, in dealing with the Saxons, was compelled to translate the value of his coin, the *solidus*, by equating it to the value of an ox. In modern times we find ten cows to be the standard price of a wife among the Zulus.

Our word *pecuniary* is derived from the Latin *pecunia* (money), which came from *pecus* (cattle). More important, when men came to use metals as mediums of exchange, they generally measured or weighed out a unit which was equivalent in value to a cow.

Metals. Gold and copper, being found in the pure state, were probably the first metals to be discovered and used by man. The Rig Veda, oldest book of the Aryan race, refers to both of these metals, but not to silver. Silver, as well as gold and copper, was known to the Egyptians 3,000 years before Christ. Tin (which combined with copper to make bronze) and iron probably came later. Gold, copper, silver, bronze, and iron served as ornaments or as implements of primitive agriculture, cookery, war, and the chase. They were also used in various shapes as mediums of exchange.

Iron, as a medium of exchange, took the shape of a hoe in China, Annam, Sierra Leone, and among the Hottentots; a fish-hook, along the shores of the Indian Ocean; an ingot, in Cambodia. The hoe

was later formalized into the hoe money of China. Similarly, in old China, the medium of the bronze knife, which was shaped like an old-fashioned razor blade with a pierced disc at one end, gradually lost its blade and finally became the *cash*, the copper disc used as small change in the interior of China today.

Copper pots and spikes became common mediums of exchange on the shores of the Mediterranean after men discovered a method of refining the ores on the isle of Cyprus. These spikes may have been the forerunner of the *obolus*, a strip of copper convenient in size for use in exchange.

Variations in the weight and purity of these different units probably led men to feel the need for coins which could be stamped to certify a definite weight and fineness.

Early coins. The first known coins were struck in Lydia about 700 B.C. They were made of unrefined electrum, consisting of about three parts of gold and one part of silver, taken from the sands of the Pactolus, the river in which Midas was said to have washed away his accursed touch of gold. Most of the fabulous wealth of Croesus, last of the Lydian kings, is supposed to have consisted of gold. Darius the Great coined the *daric* and made it the standard coin of the Persian Empire. Philip II made the *stater* the standard coin of Macedonia. In the third and fourth centuries B.C., the Greek states struck coins of a beauty that has never since been surpassed, if equalled, despite our scientific knowledge and the improved equipment of our modern mints.

Copper. The beautiful gold coins of Greece did not attain wide use, because gold was too scarce and valuable. However, copper was more plentiful, especially after the supplies of Cyprus became available. Rome adopted as a standard the copper *as* (pound), consisting of twelve *unciae* (ounces), and copper came into general use as a medium of exchange. While it is still the chief element used in making coins for small change throughout the world, it became too plentiful and hence too cheap for practical use in larger transactions. The time came when a Roman matron required, for a day's marketing, more copper than she could carry. The eight-daler copper coin of Sweden was a slab measuring 12 x 24 inches and weighing 31 pounds.

Silver. Silver was known to the Egyptians 3,000 years before Christ and was mentioned in Chinese classics dating from 2,500 B.C. The mines of Laurium, in Attica, are well known in Greek history. However, it was not until Rome had driven the Carthaginians out

of Spain in the Second Punic War (218-201 B.C.), and the Spanish mines had been brought into large production, that silver came into sufficient supply for general use as a medium of exchange.

Silver began rapidly to replace copper as the principal medium of exchange soon after 200 B.C., and for the next 2,000 years (until the second half of the nineteenth century) held the center of the world's monetary stage. The opening up of the New World added to Europe's stock of the precious metals, especially after the conquest of Peru and Mexico and the discovery of the rich silver deposit of Potosí in Bolivia (1545).

Silver is still an important factor in the monetary systems of the world, although it has been demoted to secondary rank almost everywhere.

Gold. While some gold was found in many parts of the world and everywhere held in high esteem from earliest times, it was not in sufficient supply for general use as a medium of exchange until the nineteenth century A.D. Soon after the discovery of America the world's annual production reached 200,000 ounces. This was a large amount in comparison with the then existing supply, but at that rate a full century would have been required to equal the production of a single year in our time. By 1740 yearly production passed 600,000 ounces, the figure at which it stood a hundred years later, in 1840.

The modern gold era dates from the discoveries in California (1848) and Australia (1851). Almost at once, production was increased ten-fold, to 6,000,000 ounces a year. Important discoveries were made in British Columbia and New Zealand in 1858. South Africa came into production in the 'eighties. Between 1890 and 1897 production doubled again, following the perfection of the cyanide process of extracting gold from ores in 1891 and the further development of the South African fields, and passed 11,000,000 ounces a year. The next decade, dating from the Klondike discoveries in 1897, saw production almost doubled once more. It rose to 20,000,000 ounces in 1907, and was nearly 40,000,000 ounces in 1941. Gold production dropped to about 36,500,000 ounces in 1942, because of diversion of labor and equipment to the extraction of ores required for war purposes.

Gold is the most acceptable medium of exchange throughout nearly all of the modern commercial world.

Definition of money. Money, apart from its legal significance, may be defined as any medium of exchange which is (1) widely

accepted in payment for goods and services and in settlement of debts, and is (2) accepted without reference to the standing of the person who offers it in payment.

The words *widely accepted* are admittedly indefinite. Nation-wide acceptance would unquestionably satisfy this part of the definition. Acceptability throughout a smaller area would qualify under special circumstances. For example, if a distinctive medium were accepted by everyone in the Hawaiian Islands, though only there, and if it met the second test of the definition, there would be no objection to calling it money.

The second test, accepted "without reference to the standing of the person who offers it," is used to distinguish money from checks and similar instruments which usually pass only on satisfactory identification and indorsement.

Credit and credit instruments. The term *credit* is employed with many different meanings. The student of banking will do well to think of a credit as being a *promise to pay money*. However, he will find that these promises are usually redeemed not with money but with other credits.

A credit instrument is a written promise, or order, to pay a definite or determinable sum of money to bearer, or to a specified person or his order (a credit that has been put into tangible form), as a promissory note, a bond, or a bank note. A check is a credit instrument within this definition. It is an order on a bank, presumably based upon the drawer's deposit with the bank and the bank's promise to honor the drawer's order, and the drawer tacitly agrees to "make the check good" if the bank should for any reason fail to honor it. The same reasoning applies to drafts, or bills of exchange, drawn against banks or others.

Book credit is merely the seller's or creditor's own written record of a claim against the buyer or debtor. It is not a credit instrument or even a promise to pay, but it may be supported by evidence—documented or otherwise, such as a written order or receipt for merchandise—which will help the creditor to enforce his claim. Similarly, a bank deposit is not a credit instrument but merely the debtor's (bank's) own record of its promise. A duplicate deposit receipt given to the depositor or an entry in his pass-book is impliedly a credit instrument.

A stock certificate, sometimes improperly classed as a credit instrument, is an evidence of ownership in the issuing corporation and not a promise to pay.

Credit, in one form or another, is the means of payment used in nearly all business transactions today.

Value and price. It is necessary that the student of money and banking distinguish clearly between the terms *value* and *price*. The *value* (exchange value) of a thing is its purchasing power over other goods and services generally. In other words, the exchange value of a thing is measured by the quantity of other things for which it can be exchanged. For example, a bushel of wheat may exchange for two bushels of oats, or 200 pounds of coal, or five yards of cloth, or two hours of labor, and so forth.

The *price* of a thing is its purchasing power over money, that is, the amount of money for which it can be exchanged.

From these definitions, it follows that the value of money is the reciprocal of the prices of goods and services generally. If the value of money doubles, the average of prices must be cut in half; if the value of money is reduced by three-fourths (divided by four), the average of prices is quadrupled. Changes in the average of all prices would thus provide an accurate measure of changes in the value of money.

To calculate the average of all prices would be a hopeless task. For this reason, the average of the prices of a selected group of representative commodities (or of commodities and services) is used to measure the value of money. Changes in this average measure reciprocal changes in the value of money. Obviously, the accuracy of such measurement depends upon the degree in which the average of such *selected* prices truly represents the average of *all* prices.

Kinds of money. There are three main kinds of money: (1) commodity money, (2) credit money, and (3) fiat money.

(1) *Commodity money.* Commodity money is money whose value is approximately equal to the value of the material contained in it. For example, as long as gold is worth \$35 an ounce in the United States, a twenty-dollar gold coin containing four-sevenths of an ounce of pure gold would be commodity money. With silver at fifty cents an ounce, a silver dollar consisting of two ounces of silver would likewise be commodity money. Gold, silver, and copper are the principal metals that have been used for money in this way.

When a government makes a charge for coining bullion which is equal to or less than the actual cost of coinage (including purchase of alloy), the charge is called *brassage*; a charge sufficient to yield a profit is known as *seigniorage*. A coin on which such a charge is

made may have a value higher than that of its constituent metals, and this excess value is also sometimes referred to as seigniorage.¹ The existence of a large seigniorage profit removes the coin from the commodity money class and throws it into the second or third class.

(2) *Credit money*. Any credit instrument that is widely accepted in payment for goods and services and in settlement of debts without reference to the standing of the person offering it in payment, is credit money.

Credit money, being itself a promise to pay money, presupposes the existence of another form of money in which it may be redeemed. This basic money is usually referred to as the *money of redemption*, or *standard money*.

As long as credit money can be redeemed without expense, delay, or other difficulty, its value will be the same as that of the money in which it is redeemable. If any barrier is placed in the path of redemption, the credit money may depreciate in terms of standard money by an amount sufficient to discount the holders' estimate of the barrier. If redemption is temporarily suspended, the depreciation may at first measure public doubt as to whether, or when, or at what rate, convertibility will be restored.

However, complete loss of all faith in ultimate redemption does not usually mean that inconvertible credit money will lose all of its value. In the first place, the material of which the money is made may have a value which will mark the lowest point to which the value of the money can fall. Second, there may be such a relative scarcity of money that the irredeemable credit money will retain a value far above that of the material in it. This outcome is probable if further issuance of the inconvertible money is restricted and, especially, if the government declares its willingness to accept the money in payment of public dues at par or at some relatively high percentage of par. A decree that all private creditors must accept the money in settlement of debts will tend further to bolster its value.

Money which the debtor is authorized by law to offer in payment of debt is called *legal tender*.

Bank notes and much of the paper money issued by governments are examples of credit money. When a country adopts one of the

¹The term *seigniorage* originally meant the share of the seigneur, or lord, taken to cover both the expenses and profits of coinage. Profit from coinage is more properly designated as *seigniorage profit*.

precious metals as standard money, it usually issues subsidiary coins made of cheaper metal, such as nickel and copper, with an express or implied promise to redeem them in standard money. Such subsidiary coins are credit money. They are sometimes called token or minor coins.

(3) *Fiat money.* Fiat money, as its name implies, is money by command (*fiat*: let it be done). If the United States government should take a piece of paper, or metal, or any other material, having a value substantially below \$10, and print or stamp on it the words, "This is \$10," without holding out any prospect of redeeming it with other money, and then should put it into general circulation as money, that would be an issue of fiat money. Legal tender power, or at least acceptance in payment of debt to the government, is usually necessary to give general acceptability to fiat money. It will have a value in excess of that possessed by the material in it if its supply is sufficiently limited in relation to the demand for it. The essential quality of fiat money is that its value is independent of the material from which it is made, as well as independent of any promise to redeem it in other money.

Much of the world's fiat money started out as credit money, issued in varying degrees of good faith. Later the promise was repudiated by the issuer, and the money continued to circulate as fiat money because it had legal tender power, or was acceptable in paying public dues, and because it was relatively scarce.

Coins having a high seigniorage profit and not backed by a promise to redeem them in other money are fiat money. If their value declines to a point substantially equal to the value of the material of which they are made, that is, if their seigniorage profit almost disappears, they then become commodity money. Seigniorage profit may also be wiped out by a rise in the value of the material used in the coin, and a fiat coin may thus become commodity money.

Legal tender. Legal tender was defined earlier in this chapter as money which a debtor is authorized by law to offer in payment of his debt. If a creditor refuses to accept legal tender, when offered at the proper time and place, he cannot collect any further interest on the debt or enforce any penalty or claim for damages that is based upon failure to pay. The debtor must thereafter hold himself constantly in readiness during business hours to pay the legal tender on demand.

A particular kind of money may be made full legal tender for all

debts, public and private, or legal tender for limited amounts or for limited purposes. For example, subsidiary silver and minor coins were legal tender for limited amounts, and national bank notes and "greenbacks" were legal tender for limited purposes in the United States prior to the enactment of the Thomas Amendment to the Farm Relief Act (May 12, 1933).

Legal tender power may have an important effect upon the value of money. It may also have great significance to debtors and creditors, as was the case with depreciated "greenbacks" in the United States.

Functions of money. Money performs four important functions. It serves as (1) a measure or standard of value, (2) a medium of exchange, (3) a standard of deferred payments, and (4) a store of value.

(1) *Measure of value.* We have seen that some common denominator of value is needed even as an aid to barter. With all values expressed in terms of the cow, it was comparatively easy for a shepherd to determine how many sheep he needed to give for a slave or how many pounds of salt he should receive for a sheep. In the same way, the tailor of today, with all values expressed in terms of the dollar, can readily calculate how many suits he would need to give for an automobile and how many pounds of steak he should receive for a suit. The existence of a standard of value facilitates comparison of relative values among all things.

Man has usually chosen as a unit for measuring value some one commodity that was generally desired and generally available, such as the shell, the cow, or a stated quantity of metal. This unit has itself been subject to changes in value. Severe winters and droughts must have decimated the herds from time to time and raised the value of the cow unit; the dollar also changes in value from causes affecting its supply. These changes may entail violent adjustments in the values of various things as expressed in terms of the unit. Furthermore, and more important, they cause maladjustment among the relative values of numerous kinds of goods and services when compared with one another, because some things adjust themselves more quickly and more completely than others to changes in the value of the standard unit. For example, carfares, gas and electric rates, and retail prices move more slowly than do wholesale prices.

No perfect measure of value has yet been found, but we accept these changes in value as being a lesser evil than that of being

deprived of a common denominator of value. Without a standard of value, the market place would be a Tower of Babel, for there would be no common language of trade.

The unit chosen as a measure of value, the "money of account," need not be used widely, or at all, as a medium of exchange. The unit adopted by law in the United States, the gold dollar, has not even been coined since 1889, except for memorial and exposition pieces. The "money of account" may be any unit decreed by law or custom. It may be an uncoined dollar, a claim upon a bank, or a nicely engraved piece of paper bearing the picture of a man and the legend, "This is a dollar."

(2) *Medium of exchange.* The use of a medium of exchange has freed trade from the inconvenience of barter and made possible a tremendous increase in the productive capacity of labor, through specialization or "division of labor."

We have noted that the standard unit of value need not be used as a medium of exchange. In earlier times, the unit of value was often also the principal medium of exchange. But the cow, which became the standard unit throughout the temperate zone of Europe, Asia, and Africa, could hardly have served as a medium of exchange in effecting small transactions. In our day, credits (promises to pay, in one form or another) are the mediums employed in most business dealings. The use of gold, or even gold certificates, as a medium of exchange in the United States was prohibited by Executive Order on April 5, 1933, although the gold dollar was then and thereafter declared by law to be the standard of value. The Gold Reserve Act of 1934 forbade further coinage of gold by the United States (except for foreign countries) and provided that all gold coin of the country should be withdrawn from circulation and formed into bars.

(3) *Standard of deferred payments.* Debt is an outstanding characteristic of modern society. Business organizations and individuals of every class pledge a substantial portion of their anticipated incomes in order to obtain immediate use and enjoyment of goods and services which they would be compelled to forego for a while, or perhaps forever, if purchase by credit were impossible. Producers and merchants, in competition for sales, vie with one another in offering attractive partial-payment and other credit plans. Adroit salesmanship reveals to the prospective merchant-buyer hidden opportunities for profit, arouses in the prospective consumer smoldering desires and fans them into flame, and then

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reveals an "easy" method of payment. Many buyers eagerly grasp these offers; many others devise plans of their own and seek those who are willing to lend or sell on credit. National, State, and local governments fall in line or even set the pace, especially in times of war and economic distress. Over the decades, the result has been a more or less continuous increase in the proportion of sales on credit to the total volume of business done and also an increase in the ratio of debt to aggregate wealth.

For every debtor, there is a creditor. Contracts between the two must specify a means of payment. Money is the means that is usually specified, because the debtor will presumably be able to obtain money at the time of payment; and the creditor, having received it, will then presumably be able to use it in making purchases or a new loan if he chooses to do so.

A substantial and unpredictable change in the value of money during the life of a loan works an injustice upon one party to the contract. A farmer gives a mortgage on his land, expecting to pay interest and principal by selling the products of his farm. If the prices of his products then decline fifty per cent, payments on his debt will consume the yield from twice as many acres as he had anticipated and may force him into bankruptcy. The effect upon him will be the same as if principal and interest were arbitrarily doubled with no change in prices. If interest and principal are paid, the holder of the mortgage will, of course, get a wind-fall which he will have done nothing to earn.

The man who makes the loan to the farmer has perhaps denied himself all but the mere necessities of life through long years of toil, in order to accumulate little by little a modest sum to support him and his wife during their declining years. Now, suppose prices rise and that the cost of living increases; yet he receives only the agreed number of dollars in payment of interest and principal. His hard-earned savings prove insufficient to cover even his meager requirements, and he is cheated out of the just reward for all his industry and self-sacrifice. The farmer, on the other hand, will find his debt burden lightened if the rise in prices extends to his own products in sufficient measure to give him a larger margin of profit over his increased expenses.

While a rise in the value of money (fall in prices) harms the debtor, it does not always benefit the creditor, for the debtor may become insolvent and the creditor may therefore lose all or a substantial part of his loan. In the same way, a fall in the value of

money (rise in prices) may injure the creditor without helping the debtor. The rate of wages, and especially salaries, may rise more slowly than the cost of living during a period of rising prices. As a result, wage-earners and the "white-collar class" may suffer a decrease in the *margin* over the cost of living, and it is this margin which must be relied upon by them in paying old debts. Even those who have commodities to sell may find that the price rise does not extend to these things but only to those they have to buy.

It is sometimes pointed out that any one man may be both a debtor and a creditor; and it is claimed that this occurs so frequently, in fact, that the alleged injustices wrought by changes in the value of money are exaggerated, because losses to a man as debtor may be compensated by gains to him as creditor, and vice versa. There are two answers to this contention. The first rests upon the facts that a debtor may be injured without corresponding benefit to his creditor and that a creditor may be damaged without equal advantage to his debtor. The second answer lies in the fact that debtors and creditors are not everywhere identical. Many individuals and business organizations are exclusively or at least preponderantly either debtors or creditors. The same is true of whole communities, sections of a country, and, in fact, of nations.

All of this has been written to show how desirable it is that the value of money remain relatively constant. During the 14 months following May, 1920, the value of the dollar rose 75 per cent, as measured by wholesale prices in the United States, and prices dropped 43 per cent. In the three years following 1929, the dollar again rose 50 per cent in value, by the same measure. Both rises entailed serious maladjustments between debtors and creditors as well as severe depression in business.

(4) *Store of value.* The use of money as a medium of exchange and as a standard of deferred payments leads to the use of it as a store of value. Individuals, in ordinary times, keep comparatively small amounts of money at hand for retail purchases, carfare, and so on. Business concerns need till money for making change and for petty expenditures. Substantial amounts are needed for payroll purposes. Those who have bank accounts, as long as they have confidence in the banks, deposit any money they receive in excess of their requirements for the near future.

Since banks have large obligations to pay money on demand or on short notice, they must keep considerable amounts of money on hand, although this till money may represent only a small per-

centage of their total liabilities. Likewise, a government which agrees to redeem various kinds of credit money in standard money must maintain a supply of the money of redemption that will be sufficient for this purpose. In the United States, before World War II, the Federal government and the banks normally held more than one-half of the country's stock of metallic and paper money combined; and the amount in circulation, outside the banks, usually averaged between \$40 and \$50 per capita.

The demand for currency in the hands of the people varies with the seasons, being normally greatest during the Christmas shopping period. Loss of confidence in the banks will lead to hoarding and a consequent increase in popular demand for money. When banks increase the minimum balances required of depositors, or when depositors for any other reason find it more difficult or more expensive to establish and maintain checking accounts, there ensues an increased need for money in the pockets of the people. The Christmas peak of circulation in the United States is usually from 300 million dollars to 500 million dollars above the figure for the following January. During the bank panic of 1933, the amount of money in the hands of the people increased about two billions (35 per cent) in less than sixty days.

World War II brought a tremendous increase in circulation. By the end of 1945, it stood at \$28,515 million in the United States, as compared with \$11 billion when Pearl Harbor was attacked, and thus had passed a per capita figure of \$200.

The principal store of immediate purchasing power is not in money but in bank deposits. In the United States, bank deposits are about six times the amount of money in circulation outside the Treasury and the banks, most of the deposits being payable on demand or on short notice.

Qualities of good money. *General acceptability* is by definition an essential quality of money. *Stability of value* is obviously important. In practice, some one commodity has usually been selected by law or custom, and a specified quantity of it has been designated the "money of account," or unit for measuring value. The price of the standard unit has thus been fixed at unity, but unfortunately its value has in every case been variable. Before any standard unit could realize perfect stability of value, its effective supply (the product of its quantity and its rate of turnover) would need to vary sensitively and perfectly in response to every change in the demand for it for monetary or any other uses to which

it might be put. Such perfect adjustment between supply and demand has never been realized in practice. Promising theoretical plans have been proposed, but none of these has been adequately tested.

The standard commodity should be one which, without waste or difficulty, can be *divided* into exact fractions or multiples of the specified unit, and it should, similarly, be possible to recombine these parts. If all fractions and multiples of the same denominations are to be equal in all respects, the material must be *homogeneous*. Gold and silver meet the tests of divisibility and homogeneity; diamonds and cows do not.

The standard commodity should have distinctive characteristics which are easily *recognized* and not easily counterfeited. If the commodity is sufficiently *malleable* to take a stamp properly and sufficiently *durable* to hold the design against abrasion, the various fractions and multiples of the unit will be more easily recognized.

Another quality of good money is *portability*. This implies relatively high value per unit of size and weight. For example, copper has long since become so cheap that the cost of storing and transporting it precludes its use as a standard money in transactions of any considerable magnitude. On the other hand, too high a value means that the commodity is so scarce that it is not generally available.

The most important qualities of good money may, then, be summarized as general acceptability, stability of value, divisibility, homogeneity, cognizability, malleability, durability, and portability. In practice, gold has met these tests more satisfactorily than has any other thing although it has proved distressingly unstable in value.

Fiat paper money. It will be noted that, in theory, fiat paper money could be made to meet all the tests listed above: (1) if it were made generally acceptable by giving it legal tender power; (2) if its supply were adjusted to correspond to changes in demand, so as to prevent or at least minimize changes in the value of the monetary unit; (3) if the people could feel confident and would accept assurance that in the future there would be no excessive issue of the money; (4) if convenient denominations were provided; and (5) if the money were carefully engraved and suitable laws were adequately enforced, so as to render counterfeiting impossible or at least invariably and patently unprofitable. The attribute of malleability would be replaced by ability to take an

engraving, and durability would have relatively little importance, since paper and print are comparatively inexpensive.

The reader is left to judge for himself whether all of these conditions are likely to be fulfilled by any fiat paper money of the future. They have not been in the past, but nations are being continually urged to make a new trial. The lesson of history is that sooner or later an unsupported paper currency is nearly always issued in excessive amounts, resulting in depreciation or even utter collapse. Nearly 150 years ago France blazed a downward trail with her *assignats* which the nations have since trod into a well-beaten path. The way of currency inflation is well defined and easily recognized by those who have eyes to see. Once a nation has set its feet upon that path, it finds the descent steep, the going slippery, progress all too easy. The way back is correspondingly difficult and painful.

Function of credit. The essential function of credit is to serve as a means of payment. A producer receives or anticipates an order for goods. To make them he must obtain raw materials and employ labor, and this calls for a means of payment. Unless he has sufficient standard money at hand, he must buy with credit. The supplier of materials may accept his promise to pay; failing this, or by preference, he goes to a banker for a loan. The banker agrees if satisfied that the producer will be able and willing to repay the loan at maturity. The producer now gives his promise to pay (credit) in exchange for the bank's credit, which may take the form of a bank-note or a deposit balance in his favor. He pays for his raw materials with a check, and uses checks or bank-notes for his pay roll.

A merchant buys the finished goods from the producer, upon receipt or in anticipation of an order at retail. He, too, may borrow from the bank to obtain a means of payment, and his check in payment for the goods will be used in part by the producer to pay off the latter's debt at the bank. Thus the first credit is cancelled by the second. The ultimate consumer will pay with money or credit, and this in turn will be used to extinguish the merchant's debt.

The above illustration portrays an extremely simple flow of goods from producer to ultimate consumer. Actual business is usually much more complicated. The finished goods of one producer become the raw materials of another, whose product is, in turn, the raw material of a third producer, and so on, until the final goods are at last processed as the ultimate consumer desires them.

Then they may pass through the hands of two or more middlemen before they are sold at retail for final consumption. In each exchange along the way a credit will probably be the means of payment used, and each successive credit will be employed in part to cancel the credit immediately preceding it, with little or no money being required throughout.

However, money of some kind is needed to cover a large part of the requirements for pay rolls and for retail purchases. Consequently, an expansion of production and retail trade increases the amount of money needed in general circulation. This need not be standard money, or even legal tender, if other kinds of money are available.

So important is the rôle of credit in modern society that, by way of compliment, it is frequently called "the life-blood of business." Debt, which is but another name for credit, has equal importance, but is by popular verdict assigned to a lower position in the roster of beneficent institutions. The first requisite of a sound credit system is that all concerned shall understand that a credit and a debt are the same thing.

Function of banking. A bank is essentially a dealer in credits or debts. We have seen that in making a loan a bank exchanges money or its own deposit credit for the credit of the borrower. At another time, a customer "makes a deposit" by bringing money, checks, or other credits to the bank and exchanging them for the bank's deposit credit. The acceptance and safeguarding of deposits and the making of loans and investments are commonly said to be the two primary functions of a bank. In essence, each is an exchange of credit for credit or of money for credit.

To be successful, a banker must select carefully from among the credits offered him by applicants for loans and by bond salesmen. Bonds and customers' notes make up most of the assets of a bank, and its own obligations will be no sounder than the assets behind them. The credits of some prospective borrowers are rated so highly that bankers compete for them. Unfortunately, in the attempt to increase earnings and outgrow other banks, they also sometimes compete for poorer credits. Thus the bankers of a community, by passing judgment upon credits offered, determine which enterprises shall have the advantage of using bank credits, or money obtained through banks, in the conduct of their affairs. Inability to borrow at a bank may prove a serious handicap to a business concern. The bankers also determine the extent to which each

enterprise shall have access to bank credits, and, collectively, they fix the aggregate amount available to the community as a whole.

Bankers, like other men, make mistakes, and their errors are costly to themselves as well as to the community. By lending less than a customer needs and deserves, a bank penalizes the customer as well as society generally, and forfeits an opportunity to make a profit for itself. On the other hand, the granting of unwarranted loans not only helps the borrowers to launch unprofitable ventures but subjects the bank to losses which may endanger its very existence and bring heavy loss to its own depositors and other creditors. Excessive timidity on the part of bankers will stunt an entire community; excessive optimism will result first in an unwarranted expansion of credit and later in a reaction derived from the over-expansion that preceded it.

Through selection from among prospective borrowers, banks exercise a *qualitative control* over credit. They exercise *quantitative control* when they limit the aggregate of their loans and investments.

Bank credit in a business boom. Credit is a delicate plant which flourishes extravagantly under favorable conditions and is exceedingly quick to wither in adversity. It bears the seed of its own destruction.

A tendency toward overexpansion is inherent in every credit system. A merchant foresees or imagines an opportunity to sell certain goods at a profit. If he can obtain a means of payment, he orders the goods from a manufacturer, who in turn sets about the collection of raw materials and the employment of labor necessary to produce the merchandise. If there is no hitch, the goods are produced and sold, perhaps on credit. Our merchant and others like him, encouraged by the realization of their first plans, reorder to replenish their stocks. This causes further activity at the factories and in service organizations, and requires more raw materials and the employment of more labor. With increased incomes, factory and service employees are able to buy the goods from the merchant, and thus they confirm his optimism. Each successful turn of the goods encourages another trial and influences additional merchants to make the same experiment. Bankers fall in line more readily, as they see goods moving at a profit. Manufacturers, their employees, and the merchants themselves, with increased incomes, begin to direct a part of their purchasing power into different channels, and other lines of business consequently start to expand.

Thus the effects of the first merchant's initiative spread in ever-widening circles, and new initiatives are taken.

Sooner or later, in certain lines, demand begins to press upon supply. Raw materials become scarce, overtime becomes the rule in factories, production costs rise, and producers are compelled to advance their prices. The rise in prices confirms the judgment of those who have been accumulating stocks and encourages further accumulation. Retailers, wholesalers, and producers begin to increase stocks as a speculation for another advance in prices if they are still able to obtain accommodation at the banks. Prices rise again, and profit on sales increases. Consequently, bank loans appear to have even a wider margin of safety than before. The same condition spreads among other lines until it becomes general.

While a rise in commodity prices has characterized most of the booms of the past, it has not been an essential characteristic of every period of expansion. In the great boom that followed the First World War, for example, the general average of commodity prices was fairly stable. There was, however, an instability of prices among certain important groups of commodities, with the result that equilibrium of purchasing power between agriculture and industry was seriously disturbed.

Increase in the physical inventory of both consumers' and capital goods is practically certain to accompany an expansion of business activity, if only to support the rising volume of production and sales. Of course, the monetary value of inventories will rise even faster than physical inventories if prices advance, and both will pile still higher if a further rise in prices is anticipated.

During a boom, trade and retail credits expand even faster than the total volume of business, because an increasing percentage of sales is made on credit.

Characteristic of every boom is an increase in business profits and a consequent rise in the prices of corporate stocks. The increase in business profits and in pay rolls is likely to cause a rise in rentals and in prices of real estate.

A substantial part of the increase in the inventories of goods is likely to be financed directly through bank loans. Some will be financed through trade and retail credits, and these in turn will be partially financed by bank loans. Part of the increased values of production facilities, merchandise, and raw materials will be financed through the sale of corporate securities to the public; but the buyers of these securities will obtain part of the required funds

through bank loans, and the banks, themselves, may purchase some of the new securities.

With a larger number of corporate shares outstanding and with a higher average price per share, the community's inventory of securities increases. This increase is largely financed by bank credit, and the same is true of the community's increased inventory of real estate. Whether the rise in prices and the increases in inventories come in commodities, in corporate securities, in real estate, or in any combination of them, they will be financed largely by bank loans and investments.

Thus the use of bank credit, through loans and investments made by the banks, facilitates an increase in production and in business profits, an advance in prices, and an expansion of inventories (whether in commodities, securities, or real estate). The rise in profits encourages expansion and creates a demand for additional credit. If the credit is forthcoming, it leads to further expansion of business activity and profit. This spiral of rising profits and credit expansion will go on until something happens to check it.

Limit to expansion of bank credit. Banks cannot indefinitely expand their loans and investments to accommodate the increasing requirements of a business boom. They acquire these assets (loans and investments) for the most part by increasing their own liabilities in the form of deposit obligations. Increased bank deposits require at least correspondingly larger reserves of cash or its equivalent in the banks if they are to remain solvent. At the beginning of a boom, the banks must have excess reserves, or they could not increase their deposit liabilities in order to expand their loans and investments. The larger their excess reserves, the more they can expand deposits before the excess is exhausted, but exhaustion is none the less certain if expansion is permitted to continue.

If the banks can obtain increasing supplies of cash, or its equivalent, during a boom, they can continue the expansion of their deposits and, hence, of their loans and investments. For a time, reserves may be imported from other communities; but such importation cannot go on indefinitely because the excess reserves of other communities will also be exhausted. The existence of a sympathetic central bank, which will rediscount or purchase assets from the commercial banks and thus supply them with cash or its equivalent, will postpone the exhaustion of excess reserves in the

banks for a time but not indefinitely, because there is a limit to the expansion power of a central bank just as in the case of other banks. It must increase its liabilities (deposits or circulating notes) in order to rediscount or purchase assets from the commercial banks and thus must exhaust its excess reserves.

Sooner or later, the banks will reach the limit of their power to expand deposits and of their ability, through deposits, to expand their loans and investments.

Need for credit control. The banks, to protect themselves as they approach the limit of their expansion power, begin to scrutinize loans and investments more carefully. Bond salesmen find the going more difficult. Many applications for new loans and for renewals of existing loans are denied, and interest rates generally are raised. Refusal to grant new loans or to renew old ones places some in a position where they must liquidate inventories, or receivables, or corporate securities, or other assets, in order to satisfy their creditors. The rise in interest rates reduces the profit in carrying inventories, securities, and other assets. This presses especially hard upon speculators and wholesalers who trade on a narrow margin of profit, and influences them to liquidate. Others sell in anticipation of forced liquidation and a consequent drop in prices, some even "going short of the market."

As wave after wave of selling strikes the market, prices break; liquidation becomes general, even panicky; prices break again and again; the margin of security behind bank loans disappears; depositors may begin to lose confidence in their banks and attempt to convert their deposits into money; some, perhaps many, banks may be unable to obtain the money necessary to meet withdrawals, and the worst fears of their depositors may be realized.

If bankers apply the brakes in time, the comparatively small amount of necessary liquidation can be accomplished without serious losses, decline in prices, drainage of money from the banks, or weakening of public confidence. But if the spiral is allowed to run its natural course too long, the result will be an overwhelming flood of liquidation, a disastrous fall in prices, numerous failures, runs on banks already weakened by decrease of their monetary reserves, a general collapse of the credit system.

Bankers, in determining when to call a halt upon credit expansion, need to remember that even if public confidence is retained, they will be subjected to a continued seepage of money into general circulation for some time after they have taken action. People

will have made commitments from which they cannot withdraw; there will be an accumulation of orders to fill; and many depositors will continue to withdraw money for making retail purchases, because they will not at once realize that their incomes are likely to be reduced. Furthermore, if public confidence is to be retained and general liquidation avoided, it is necessary to apply the brakes gently at first and then with gradually increasing force until the desired effect has been attained, that is, until the dangerous expansion of bank deposits has been stopped.

Obviously, there can be no approach to relative stability of the general price level and of business activity unless there is an intelligent and effective control of credit by or through the banks.

Questions for Study and Review

1. Why is a money-and-credit economy preferable to a barter economy?
2. Discuss the relative suitability of the gold dollar and the cow as units of standard money.
3. Define. *money, credit, credit instrument, value, price.*
4. (a) Distinguish among commodity money, credit money, and fiat money.
(b) Give an example of each.
5. Why is it impossible for a redeemable credit money to serve also as the standard money?
6. What is the result of a creditor's refusal to accept a proper offer of legal tender in payment of debt?
7. Discuss the extent to which each of the important functions of money adds to the need for a supply of money.
8. Explain the functions of credit and banking.

Problems

1. Prepare a table showing for each of the last ten years: (a) world production of gold; (b) world stock of monetary gold; and (c) ratio of annual production to stock of gold. Assume that the average annual production of wheat is six times the average stock of wheat. Discuss the relative extent to which the values of the two commodities might be affected by doubling annual production.
2. (a) Calculate the change which occurs in the value of money when the average of prices rises 50 per cent; 30 per cent; 15 per cent.
(b) Calculate the change which would occur in the general price level if the value of money were to rise 50 per cent; 65 per cent; 40 per cent.
3. Calculate the length of a rectangular solid 25 feet high and 4 feet wide which would contain the monetary gold stock of the United States on the basis of the following data:
 - (a) Gold stock, \$20,000,000,000;
 - (b) Price per troy ounce, \$35;
 - (c) Weight of one cubic foot of pure gold, 17,543.249 troy ounces.

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CHAPTER 2

Monetary Standards

Monetary standards. The term *monetary standard* refers to the type of standard money used in a monetary system. Thus, if in a particular country gold is the money or material in which credits are ultimately redeemable, that country is said to be on a gold standard.

Bank deposits and the ordinary credits of business may be redeemable in bank notes, which are credit money. And bank notes, themselves, may be redeemable in another form of credit money, such as the notes of a central bank or some kind of government credit money like United States notes (greenbacks). However, it is obvious that no redeemable credit money can be the standard money of a country, because it is, itself, redeemable in some other money. Therefore, the standard must be either commodity money or fiat money.¹

It should be noted that a repudiated credit money becomes fiat money, and may thus come to serve as the standard money. Fur-

¹ Some writers employ a different terminology with apparently the same concept in mind. For example, Kemmerer (see pp. 13 et seq., of *Money*) names commodity money and "standard fiduciary money" as the two important classes of standard money and defines "standard fiduciary money" as "standard money whose value as money is appreciably greater than its value as a commodity." The term *fiduciary* is presumably used in this instance to imply faith that the supply will be limited. Faith in redemption would put the money in the class of credit money. But redeemable credit money is not standard money.

Kemmerer also lists a third class of standard money, namely, "depressed value money" and defines it as "standard money which has a bullion value greater than its value as money and which by stringent laws is prevented from being melted down or exported." (See pp. 13 and 101-108 of *Money*.) As Kemmerer points out, such a standard could not be maintained over a long period of time as a practical matter, because of the difficulty of preventing the melting down and exportation of the money.

thermore, an irredeemable credit money, though not formally repudiated, may forfeit public confidence to such an extent that it takes on all the characteristics of fiat money except the legal definition. Such an irredeemable currency, if issued by the government or the central bank, may be *in fact* the standard money of redemption, although the money in which it was originally to have been redeemed continues to be the standard money in so far as legal fiction is concerned.

(A) **Commodity standards.** Gold and silver are the two commodities that have been chiefly used as standard money during the Christian era, although copper is still used in backward communities as commodity money for making small purchases.

(1) *Gold standards.* There are three principal types of gold standards: the gold coin standard, the gold bullion standard, and the gold exchange standard.

(a) *Gold coin standard.* The essentials of a full gold coin standard are:

First, a definite quantity of gold of a certain fineness is adopted as the standard unit for measuring values.

Second, gold coin is full legal tender.

Third, all credit money issued by the government or by the central bank, and all legal tender money other than gold coins, regardless of who issues it, is redeemable at par in gold coin on demand.

Fourth, gold is coined without limit and without substantial seigniorage profit for all who bring it to the mint.

Fifth, there is no restriction upon the importation or exportation of gold in any form.

To the extent that a country violates any of the conditions listed above, by that much it will depart from a full gold coin standard.

The gold coin standard is here classified as a form of commodity standard, and in practice it is generally apt to be a commodity standard. It should be noted, however, that it may be a fiat standard. If the standard gold coins were somehow given a value substantially above that of the metal in them, they would become fiat money; and a country having such standard coins would be on a fiat standard, the standard fiat money being made of gold instead of paper or some other material. An excessive seigniorage would have such an effect. The same result would follow if coinage were limited sufficiently to give the coins a scarcity value higher than the value of the gold in them.

Free movement of gold from the monetary stock into the industrial arts is sometimes listed as an essential to the maintenance of a full gold coin or gold bullion standard. A country which restricted the employment of monetary gold in industry would merely handicap its gold-using industries in favor of similar industries abroad. A world-wide restriction of gold-using industries would compel the substitution of other materials for gold in the arts, release large quantities of the metal for monetary use, and lower its value, unless the monetary demand for gold should increase commensurately. However, neither national nor international restriction of this sort would affect the existence of any gold or gold bullion standard, except to render its maintenance a somewhat easier task.

(b) *Gold bullion standard.* The essentials of a full gold bullion standard are:

First, a definite quantity of gold of a certain fineness is adopted as the standard unit of value.

Second, while gold is not coined, gold bullion is full legal tender.

Third, all credit money issued by the government or by the central bank, and all legal tender money, are redeemable in stipulated minimum amounts at par in gold bullion on demand.

Fourth, gold of standard fineness is purchased by the treasury or central bank at a fixed price and without limitation from all who offer it.

Fifth, there is no restriction upon the importation or exportation of gold in any form.

In practice, the gold bullion standard is employed in modified form as a means of economizing in the use of gold. The metal is formed into standard bars of, say, 400 ounces .995 fine, having a value of about \$14,000, and is kept in the national treasury or the central bank. Other forms of money are redeemed in gold only in minimum amounts equivalent to the value of the standard bar or some multiple of the standard bar. On the principle that gold is not needed for internal circulation, it may also be provided that bars will be released only for exportation and to fill the demonstrated needs of industry. The government may further reserve the right to determine when the exportation of gold is in the public interest, and restrict gold redemption to such occasions. The government may also sell gold at a price substantially higher than that which it pays, and thus destroy the parity between gold and other forms of money. It may require gold exporters to obtain licenses

or impose expensive and annoying delay upon redemption, or otherwise impede free movement of gold.

Such limitations amount to departure from the full gold bullion standard, but there would be little object in maintaining the full standard, since the very purpose of adopting a gold bullion rather than a gold coin standard is to keep gold out of internal circulation and reserve it for use solely in settling international balances and in industry. Of course, restriction may be carried so far as utterly to destroy the standard.

Since gold is not coined under the gold bullion standard, one or more other forms of money, redeemable in gold bullion, are made legal tender.

(c) *Gold exchange standard.* Gold need not be coined or held as bullion in a country which adopts the gold exchange standard. While different gold exchange standards have varied in detail, the fundamentals are as follows:

First, a definite quantity of gold of a certain fineness is adopted as the standard unit of value.

Second, the national treasury or central bank establishes a credit balance with bankers in a foreign country that is on a gold coin or bullion standard. This balance may be built up by borrowing abroad or by depositing gold or credits with the foreign bankers.

Third, all credit money issued by the government or by the central bank, and all legal tender money, are redeemed, in minimum amounts, say, equivalent to \$5,000, on demand in gold exchange at a fixed ratio. That is, the government agrees to sell drafts or bills of exchange, drawn against its balance with the foreign bankers, at a price sufficiently above par to cover the cost of actually exporting gold to the depository country, but no higher. The sale of this gold exchange (bills of exchange on a gold standard country) at such a price is equivalent to redeeming the country's own money in gold *delivered in the depository country*, since the bank balances there are convertible into gold at par. Thus, any person having occasion to export gold to the *depository country* finds that the cost of a bill of exchange purchased from the government at the fixed price is exactly the same as if he were to convert his local currency into gold at par and export it at his own expense. However, if circumstances require a person to deliver gold to some foreign country other than the depository country, at a time when exchange on the depository country is at the export point, he is in the same position as he would be if, having converted his local currency into

gold at par, he were then required to route the shipment of gold to its destination *by way of the depository country*, and this cost may be higher than that of shipping by a more direct route.

Fourth, the government agrees to buy bills of exchange, drawn on the depository country, at a discount sufficient to cover the cost of importing gold from that country.² Thus, a person having bills of exchange on the depository country will receive as much local currency by selling them to the government as if he were to obtain gold in the depository country, import it, and exchange it at the treasury for local currency at par. The holder of bills of exchange on countries other than the depository country is in a different position, since the fixed buying and selling prices at the treasury apply only to bills on the depository country. He may convert his bills into gold in the country on which they are drawn, import the gold, and exchange it at the treasury for local currency. But the treasury, having no need for gold at home, may buy it only at a discount sufficient to cover the cost of shipment to the depository country where it will be needed. A less expensive course may be to ship the gold to the depository country from the country on which the bills are drawn, and then sell drafts against it to the treasury. This is equivalent to requiring that all gold imports be routed by way of the depository country. Bills bought by the treasury are used to maintain the balance with foreign bankers against which the treasury has undertaken to sell bills.

The chief advantage claimed for the gold exchange standard is economy in the use of gold. Like the gold bullion standard, it dispenses with internal circulation of gold and thus effects an economy to the country employing it. This would be the limit to economy in gold if the foreign balance should consist entirely of an earmarked deposit of gold, but this is not the case in actual practice. A deposit balance with bankers will serve as well as gold if the deposit is convertible into gold at par on demand. Under this arrangement, since the depository bankers do not carry a reserve of

² It is customary to have the foreign depository bank or banks stand ready to sell in their market drafts on the home treasury or central bank at a price sufficiently above par to cover the cost of shipping gold from the depository country to the home market. For example, the Philippine Gold Standard Act of 1903, which established a gold exchange standard for the Philippines, directed the Treasurer of the Philippines, on demand, to sell demand drafts, in amounts of not less than \$5,000, on the New York depository banks at a premium of three-fourths of one per cent, taking Philippine currency in payment. The Act also provided that the New York depository bank should sell, on demand, demand drafts, in amounts of not less than 10,000 pesos (parity being 80¢ per peso), on the Philippine Treasury at the same premium, the drafts being payable in Philippine currency.

100 per cent against the deposit, a further economy in gold is effected.

A gold exchange standard country must make the same outlay to acquire its foreign balance as would be needed to obtain the gold necessary for the establishment of a gold bullion standard, except for differences arising out of the cost of shipping gold. But it may receive interest on its foreign balance, while a gold bullion reserve earns nothing. It also profits from the margin between the prices at which it buys and sells exchange.

The chief deterrent to general adoption of the gold exchange standard is lack of confidence among nations. No major power today would be willing to have its gold reserves held abroad, for fear that the depository country might either become an enemy, or itself go off the gold standard. As a practical matter, this standard is best adapted to a country which is in some way dependent upon the depository country. Even then there remains the possibility that the depository country may abandon the gold standard or debase its currency. Recent history discourages confidence in the currencies of even the greatest powers.

Central banks in various countries, especially after the First World War, were permitted to count balances in gold standard countries as part of their legally required reserves, on the theory that such balances were equivalent to a vault gold reserve for the purpose of making foreign payments. A country permitting this practice was sometimes said to be on the gold exchange standard. However, such an arrangement does not constitute adoption of the gold exchange standard, unless there is an agreement by the government or the central bank to buy and sell exchange on a gold standard country at *fixed prices* which are, respectively, below and above par by an amount not greater than the cost of shipping gold between the two countries. It should be noted that the treasury or central bank, without making any pledge as to future policy, may currently sell gold exchange at a fixed maximum price, and thus establish for the time being a *de facto* gold exchange standard.

The gold exchange standard resembles the gold coin standard in that its successful maintenance depends upon temperance in government borrowing, in the issuance of money for internal circulation, and in the expansion of credit generally. Excess in any of these matters, if prolonged, will wipe out the foreign balances which are prerequisite to the government's sale of gold exchange, and will render their restoration difficult or impossible. Failure to sell bills

of exchange at the agreed price means abandonment of the gold exchange standard, just as failure by a gold coin standard country to redeem its credit currency in gold coin means abandonment of that standard. If the premium charged in selling gold exchange is advanced to a point higher than the cost of shipping gold to the depository country, internal currency is no longer being maintained at par with gold for the purpose of making foreign payments, and this amounts to debasement of the currency.

(2) *Silver standards.* A silver coin standard, a silver bullion standard, or a silver exchange standard could be established along the same lines as those described above in connection with the corresponding gold standards, with silver substituted for gold. In practice, only the silver coin standard has been generally used, although in certain parts of the Orient the metal has circulated as money in the form of bullion as well as coin. Silver's great handicap as standard money is simply that it lacks the universal acceptability that is enjoyed by gold.

Advocates of the gold standard assert that gold has two important advantages over silver as standard money: first, gold is more valuable in proportion to weight and bulk, and therefore less expensive to transport in making international payments; and, second, gold is more stable in value. The first statement is obviously true. A comparison of the costs of shipping \$1,000,000 of gold and silver from New York to London (with silver at 50 cents an ounce) shows the following:

	GOLD		SILVER	
	Rate	Amount	Rate	Amount
Freight.....	$\frac{1}{4}$ of 1% of value	\$2,500	$\frac{1}{4}$ of 1% of value	\$7,500
Insurance.....	4 $\frac{1}{4}$ cts. per \$100	450	4 $\frac{1}{4}$ cts. per \$100	450
Cartage.....	\$5 per keg (\$50,000)	100	\$15 per 100,000 oss.	300
Cooperage.....	\$3.50 per keg	70		
Total.....		\$3,120		\$8,250

As silver is shipped in naked bars, no cooperage cost is incurred. Neither metal has an advantage in interest costs, which depend upon the rate in the market where the commitment is made and upon the time elapsing between the making of the commitment and the sale of drafts against the shipment. Total expense of shipping a given value of silver is seen to be more than double that of an

equivalent amount of gold. Hence gold is preferred to silver as a means of international payment, all other things being equal. Of course, a rise in the relative value of silver would tend to improve its position in this respect.

Value of silver. The statement that gold is more stable in value than silver is not so easily proved. Proponents of silver point to what they consider the remarkable stability in the ratio of silver to gold during the centuries when both metals were used as standard money. According to Soetbeer, 10.75 ounces of silver had the value of one ounce of gold at the beginning of the sixteenth century. A century later, the ratio had risen to 12.25:1, following the influx of silver into Europe from the mines of Mexico and Peru. The average ratio for the year 1700 was 14.81:1, and the annual average during the next hundred years varied between a low of 14.14:1 in 1760 to a high of 15.74:1 in 1799. Conditions were disturbed in the early years of the nineteenth century, and the annual average, after rising to 16.25:1 in 1813, fell to 15.04:1 in the next year. From 1818 to 1873, the average ranged between a low of 15.19:1 and a high of 15.95:1 in 1821.

England, which adopted the gold standard by law in 1816, after having been on a *de facto* gold basis for a century, was the only important country on the gold standard in 1873. But in that year Germany went on a gold basis, and free coinage of silver was stopped by most of the important countries of Europe during the next decade. The result was a rapid and almost continuous decline in the price of silver in terms of gold, and this decline lasted until the First World War. The average ratio for 1915 was 40.48:1. During the War, the price of silver made a phenomenal rise to the level which had prevailed before the 'seventies, owing primarily to heavy demand for making payments to British India, coupled with a sharp decrease in production by Mexico, the largest silver producer. The peak of 1920 (15.31:1) was followed by a more rapid decline than ever. In the next decade, nearly every important nation (except China, India, Spain, and the United States) reduced the fineness of its silver coins. France, Belgium, and Finland discontinued the coinage of silver, and British India began to sell her surplus stock. At the same time, production increased until it reached an all-time record of nearly 261 million ounces in 1929. On January 3, the first business day of 1933, the prices of silver were the lowest in history, 16½d. in London and 24½ cents in New York, which meant a ratio of 84.37:1.

In respect to the price decline since 1873, the defense of silver is that no such drop would have occurred if the world had continued the general use of silver as standard money. This is no doubt true, but no one can accurately estimate what would have happened, for a higher price for silver would also have caused a larger production.

Some advocates of silver also point out that the purchasing power of silver in terms of general commodities has been more stable than that of gold since 1914. This was especially true of the periods from 1915 to 1921 and 1930 to 1933. But who can say what would have happened to the value of silver if it had been subjected to the same monetary strain as gold during those years?

It is also argued that silver production since 1890 has more closely followed the production trend of all commodities than has gold, and, therefore, that a silver standard, or a combination of silver with gold would have given the world greater stability in prices than has been the case under the gold regime. During this period and especially during the first half of it, gold production increased much more rapidly than did commodity production, and silver production increased less rapidly than either. From this fact it is reasoned that general prices could not have risen so rapidly from 1896 to 1915 if silver had been allowed to do its work. Again it must be asked: who knows what would have happened to the production of silver if its full monetary use had continued and its value had consequently been maintained at a level higher than actually did prevail?

The student must remember that not all of the arguments for or against a wider monetary use of silver are limited to an altruistic or even an unbiased economic basis. Mexico and the United States are large producers and, normally, large exporters of silver. American capital probably controls over 60 per cent of the world's mine production of silver, and British capital, 20 per cent. In recent years some governments have had for sale silver obtained by reducing the fineness of their coins. All these interests would like to see a high price for silver. On the other hand, the Orient is normally a buyer of silver, and would like to get it at a reasonable price.

(3) *Bimetallic standard.* The essentials of a bimetallic standard are:

First, the standard of value is defined as either of two metals, a definite quantity and fineness of each being specified as the unit—for example, 20 grains of gold and 400 grains of silver.

Second, all credit money issued by the government or the central bank, and all legal tender money, are redeemable, at the option of the government, in either metal.

Third, both metals are full legal tender.

Fourth, there is no limitation upon the importation or exportation of either metal in any form.

Fifth, in case of a bimetallic *coin* standard, there is free and unlimited coinage of both metals; and, in case of a bimetallic *bullion* standard, the treasury freely and without limit exchanges government credit money for either metal at the officially fixed ratios.

In practice, only the bimetallic coin standard has been used, but a bimetallic bullion standard might be adopted for the same reasons as apply in the case of a gold bullion standard.

The chief argument for the bimetallic standard is that it would be more stable than either gold or silver. For example, if silver production were to increase, and silver therefore become cheaper in terms of gold, silver would be used more extensively for monetary purposes and gold would be released for other uses. The increased monetary demand for silver would lessen its decline in value, and the increased supply of gold coming from the monetary stock into the bullion market would lower the value of gold. Thus, while both would fall in value together, neither would fall as much as would silver if that alone were being used as the standard. Similarly, a decline in the value of gold would be checked by the substitution of gold for silver in the monetary stock. If either metal started to rise in value as against the other, its rise would be checked by the substitution of the other metal.

Consequently, a bimetallic standard would be more stable than a gold standard during a period when the value of gold tended to fluctuate more than that of silver, and more stable than a silver standard when silver tended to fluctuate more than gold. This must be admitted by opponents of the bimetallic standard. However, by the same reasoning, they contend rightly that a bimetallic standard would be *less* stable than gold when gold was fluctuating *less* than silver, and *less* stable than silver when silver was fluctuating *less* than gold.

Opponents of bimetallism also point out the danger that one of the two metals may disappear from the monetary stock. For example, assume that the United States were to adopt a bimetallic standard with the dollar defined as $13 \frac{5}{7}$ grains of pure gold or 480 grains of pure silver. This would mean that the Treasury val-

ued gold at \$35 an ounce and silver at \$1 an ounce. If the two metals had the same ratio of 35:1 in the bullion markets of the world, no problem would arise. Now suppose a sudden increase in the supply of silver sufficient to reduce the market price of silver to 50 cents an ounce. Only silver would be taken to the government to be coined or exchanged for credit money. Gold would be taken to the market and exchanged for silver. Obviously, gold would be rapidly driven out of the monetary stock and replaced by silver.

This tendency for cheaper money to drive dearer money out of circulation is called Gresham's Law, after Sir Thomas Gresham, Queen Elizabeth's master of the mint, who was one of many to draw attention to it.

Under the circumstances outlined above, gold would continue to leave the monetary stock as long as the operation was profitable. With $13 \frac{5}{7}$ grains of gold exchanging for 2 ounces of silver in the market, and 2 ounces of silver exchanging for \$2 at the mint, there would be a profit of 100 per cent, less interest, brokerage, and shipping charges. But this pouring of gold into the bullion market would lower the value of gold, and the removal of silver from the market would raise the value of silver, thus drawing the market ratio back toward the mint ratio. If the country's gold stock was sufficiently large, it could release enough gold and absorb enough silver to bring the world's market ratio back to its mint ratio, without losing all of its monetary gold. Otherwise, all of its gold would disappear, and it would be left with silver alone.

The question as to whether any single country, or a group of countries working together, could maintain actual circulation of both gold and silver in a bimetallic system, would be determined by the size of their monetary stocks of the metals as compared with the market forces working against them.

(4) *Symmetallic standard.* The symmetallic standard has been proposed (but never adopted) as a means of obtaining the benefits claimed for bimetallicism without subjecting the monetary system to the operation of Gresham's Law. Under this plan, the standard unit of value would be a definite quantity of a fusion or combination of two or more metals in some specified proportion to one another. For example, the dollar might be a coin or bar containing $6 \frac{6}{7}$ grains of gold and 240 grains of silver. Two such dollars would have the same value as one gold dollar containing $13 \frac{5}{7}$ grains of gold plus one silver dollar containing 480 grains

of silver coined under a bimetallic system, and the mint ratio between the two metals would be 35:1 in either case.

Credit money would be redeemed in symmetrical coins or bars, or in gold bars plus silver bars in fixed proportion. If the bullion market ratio should now go to 70:1, as assumed in the discussion of bimetallism, any person seeking to take advantage of the situation would receive *both* gold *and* silver in redeeming paper money, and would be required to present both metals (or the equivalent in value as determined by the bullion market) in order to get paper money. A paper dollar could be exchanged at the mint for 6 6/7 grains of gold plus 240 grains of silver, and the gold could then be exchanged for 480 grains of silver in the bullion market, the exchange leaving the holder with 720 grains of silver. But when he returned to the mint with all this silver, he would find that he could get for it only one paper dollar, and his expense and trouble would represent a net loss.

Symmetallism is clearly superior to bimetallism in so far as Gresham's Law is concerned. It is inferior in that the symmetrical unit would have no fixed value in comparison with the monetary units of either gold or silver standard countries, while the gold unit of a maintained bimetallic system does have a fixed relationship to the units of all gold standard countries, and the silver unit has a fixed relationship to the units of silver standard countries. How the lack of such a fixed relationship handicaps a country in world trade and in world financial operations will be understood after reading the chapters on foreign exchange.

(5) *Compensated standard.* The compensated, or stabilized, standard has been proposed as a means of stabilizing the value of the monetary unit. Under this plan, the unit would not be coined, but redemption would be in bullion, and the quantity of metal in the unit would be changed periodically to counterbalance changes in its value. If prices rose—that is, if the value of the unit fell—the quantity of metal in the unit would be increased so as to raise its value. A fall in prices—that is, rise in the value of the unit—would be compensated by reducing the weight of the unit. Thus, if prices were tending to rise, the holder of credit money would receive a larger quantity of metal upon redemption at the second adjustment date than at the first; a still larger quantity on the third date; and so on. To hamper speculation in money at the expense of the government, the selling price of gold, or ratio of redemption at the treasury, would be higher than the buying price, or ratio of

issuing credit money, and no single periodic adjustment in the weight of the unit would be greater than this margin. If such limited adjustment for a given period failed to compensate for the rise in prices, successive adjustments within the limit would be made at stated intervals until the desired result was attained. Continued decline in prices would be compensated by successive weight reductions within the limit.

It will be observed that a speculator might profit during a continued rise in prices by holding credit money until two or more adjustment dates had passed. During a continued decline in prices he might profit by selling credit money short (borrowing), and maintaining his debtor position through two or more periods.

The compensated standard would have the same disadvantage as the symmetallic standard in that the unit would have no fixed value in comparison with the monetary units of other countries, unless other countries adopted the same standard and the same basis for measuring and compensating changes in the value of the unit. While the compensated standard has been proposed only in connection with gold, and never adopted, the idea would be equally adaptable to any of the other types of commodity standards described above, as long as the unit was not coined. A compensated silver standard, or bimetallic standard, or symmetallic standard would be just as feasible as a compensated gold standard.

(6) "*Tabular standard.*" The so-called "tabular standard" is a proposed method of eliminating the injustice between debtor and creditor that is wrought by price changes. This plan would provide that the borrower repay an amount of money which at the time of payment would have a purchasing power equal to that possessed by the money he borrowed at the time the loan was made, and that interest payments be similarly adjusted. Assume that \$1,000 was borrowed for one year with interest at 5 per cent. If during that year prices rose 10 per cent, the repayment of \$1,100 as principal and \$55 as interest would counterbalance the loss in the value of money. A 10 per cent fall in prices would be compensated by a repayment of \$900 as principal and \$45 as interest. Similar adjustments would be made on other term contracts, such as leases, insurance, and so forth.

The "tabular standard" is often referred to as a type of commodity standard, since the adjustments would be based on changes in the prices of a selected group of commodities (and perhaps

services). But it is not a monetary standard at all; it is merely a method of adjusting deferred payments which could be used in connection with any type of monetary standard.

Nor would the tabular plan eradicate all the evils of changing prices. As between debtor and creditor, it would do only rough and varying justice. Suppose that during the life of a farm mortgage, there is a 50 per cent rise in the prices of the group of commodities chosen to measure changes in the value of money, but a rise of only 10 per cent in the prices of the products which the farmer has to sell. Under the tabular plan, the farmer will be required to repay 50 per cent more dollars than he borrowed, although the number of dollars in his net income may have actually decreased because of the rising cost of production. The 50 per cent increase in dollars paid to the creditor may give the creditor either greater or less purchasing power *over the things he has to buy* than was possessed by the dollars he surrendered at the time the loan was made.

The plan might in considerable degree mitigate, but could hardly eliminate, business booms and depressions, with all their attendant evils. Booms are largely based on speculation and credit expansion. If the profit anticipated from a rise in prices were consumed by an increase in the amount that the borrowing speculator had to pay in settling his debts, there would be no object in speculating or in inflating credit to support speculation. If business booms could thus be held within reasonable limits, succeeding depressions would be similarly limited, because the seed of a depression is sown during, and its extent largely determined by, the boom preceding it. However, the prices of individual commodities will fluctuate out of line with average prices, and hence opportunities for speculative profits will occur, regardless of any general plan of stabilizing the value of money or for adjusting deferred payments to compensate changes in general prices.

(B) **Fiat standards.** Fiat money may be made of paper, metal, or any other material. There are two tests of fiat money: the value of the money must be substantially higher than that of the material contained in it, and the money must not be a promise to pay some other kind of money. A depreciated credit money remains credit money at law until repudiated; but the inability to pay, or the bad faith, of the issuing government may become so patent that the money may, for all practical purposes, be classed as fiat money.

The essentials of a fiat standard are:

First, a unit of fiat money is adopted as the standard unit of value.

Second, the standard fiat money is full legal tender.

Third, all credit money issued by the government and the central bank, and all other legal tender money, is redeemable in the standard fiat money.

Paper is the material usually employed in making fiat money, probably because the money started out as paper credit money, or because paper is thought to be cheaper. As a matter of fact, some metal, such as silver, bronze, or copper, would probably be cheaper than paper in the long run if the standard money is intended for general circulation. While the first cost of metal is higher than that of paper, metal is much the more durable.

The advantage claimed for fiat money is that its supply can be regulated so as to prevent large changes in the level of prices. In actual experience, its supply has in the past been usually "regulated" only by whatever limit there was to the productive capacity of the printing presses available for manufacturing it.

If it be granted for the moment that there could be established and maintained a regulatory body with sufficient honesty and fortitude to resist all temptation and pressure to overissue, certain objections to fiat money still remain. First, there is the question as to whether man has yet developed the knowledge and judgment necessary so to manage a system of money and credit as to achieve stability of prices. It will be replied that, nevertheless, the attempt should be made, that some form of management is generally advocated in connection with various commodity money standards, and that management would be simplified in the case of a fiat standard by the fact that the money of redemption could not be exhausted by "runs" for export or hoarding.

Since the effectiveness of management under any monetary standard has not yet been satisfactorily demonstrated, it would seem foolhardy to run the risk of inflation attendant upon a fiat standard for the sake of whatever advantages it may have in facilitating management. Moreover, this alleged advantage in management of the standard money can easily be exaggerated, for it must be remembered that it is credit, not standard money, that stands in greater need of control. To argue that the supply of a fiat money of redemption could not be exhausted, as a commodity money like gold could be--and has been, by "runs"--is to admit the intention

to overissue in case credit expansion gets out of control and public confidence is destroyed. After credit management has been perfected, it will be soon enough to undertake the mastery of a fiat standard.

A fiat standard, in common with the symmetallic and compensated standards, has another disadvantage, in that the unit would have no fixed value in comparison with the units of other countries. To overcome this, it has been suggested that an international fiat standard be adopted, with the amounts to be issued by each participating nation regulated by agreement or by a representative commission. The difficulty of initiating such a plan is admitted by its advocates. They should also admit the probable impossibility of maintaining such a limiting agreement as one member of the group after another is faced with the exigencies of war and of collapsing credit. Who can doubt that a nation at war, fighting for its very existence, would abandon this or any other monetary standard if military success seemed to require it?

A properly managed fiat standard uniformly used by all important nations would probably be ideal, but it appears too idealistic for practical application in the world in which we live today.

"Managed currencies." Some degree of management or control is attempted in any modern currency and credit system. From the establishment of the Federal Reserve System in the United States, the Federal Reserve Board and leading bankers sought in varying ways and degrees to exercise some control over credit in the country. Before that, the Federal Treasury and leading bankers, upon occasion, attempted to influence the volume of currency and credit available to the public. The same is true of the central banks, treasuries, and leading bankers in other countries.

In recent years, however, the term "managed currency" has come to have a special meaning. It can best be illustrated, perhaps, by reference to developments in Great Britain after that country was forced to abandon the gold standard in September, 1931. When Britain finally fought her way back to the gold standard in 1925, she adopted a gold bullion standard. The Gold Standard Act of 1925 (May 13) provided: "The Bank of England shall be bound to sell to any person who makes demand in that behalf at the head office of the Bank during office hours of the Bank, and pays the purchase price in any legal tender, gold bullion at the price of £3 17s. 10½d. per ounce troy of gold of the standard fineness prescribed for gold coins by the coinage act of 1870, but only in the

form of bars containing approximately 400 ounces troy of fine gold." This provision made the Bank responsible for redemption of all the country's legal tender whether or not issued by the Bank.

Effective September 21, 1931, Parliament suspended the above provisions "unless and until His Majesty by proclamation otherwise directs." Notes of the Bank of England are full legal tender and are the standard money of England today. Originally issued as credit money, their redemption has been suspended, and there is no indication as to when it will be resumed, if at all. The value of the notes is maintained by their legal tender power and by restriction of their supply in relation to the demand for them. Through "management" of the supply of money and of credit generally, the price level of Great Britain was, for several years, during time of peace, comparatively stable after suspension of the gold standard at a time when prices in many other countries (some on the gold standard) were far from stable.

At the same time, an equalization account was established in the Treasury for use in smoothing out temporary fluctuations in value between the pound and other currencies. The Scandinavian countries and most of the British dominions (the so-called sterling bloc) regulated their currencies with a view to maintaining a stable value between them and the pound. During this period, the pound sterling continued to be the most important currency in world trade.

Thus, Great Britain was able for some years to obtain satisfactory results from an inconvertible credit standard. Because of the expressed views of influential British statesmen and bankers that resumption of specie payment should be long deferred, perhaps indefinitely, the standard might be more properly termed a fiat standard. At any rate, the "managed currency" system appears to be a euphemistic term for an inconvertible credit or fiat standard. The final result will, of course, be largely determined by the intelligence and restraint with which the system is managed and the degree in which public confidence is maintained.

Fiat exchange standard. The fiat exchange standard is the same in principle as the gold exchange standard described above, the difference being that the bills of exchange, which the Treasury agrees to buy and sell at a fixed discount and premium respectively, are drawn upon a country that is on a fiat standard instead of a gold standard.

In 1898 India adopted a modified sterling exchange standard when it arranged to peg the rupee at 16d as a token coin. This was a gold exchange standard, since the government agreed to buy and sell bills of exchange on London at fixed prices, and England was on the gold standard. When England was driven off the gold standard on September 21, 1931, India stuck to the sterling exchange standard. Since then England has been in fact on a fiat standard, and India in consequence has been on a fiat exchange basis.

Questions for Study and Review

1. State the essentials of a gold coin standard.
2. Explain the essential differences between the gold coin standard and: (a) the gold bullion standard; (b) the gold exchange standard.
3. State the essentials of the silver bullion standard.
4. Discuss critically the statement: "The fact that the value of silver (in terms of commodities generally) was more stable than that of gold during the period 1915-1933 proves that silver is preferable to gold as standard money."
5. State the relative advantages and disadvantages of bimetallism as compared with symmetallism.
6. Compare the effects of the compensated standard with those of the "tabular standard" upon: (a) the domestic price level; (b) the value of domestic currency in terms of foreign currencies; and (c) the interest rate on long-term bonds.
7. State arguments for and against the fiat standard.

Problems

1. Calculate the amounts of gold and silver that would be required in a symmetrical dollar to give it the purchasing power of the present gold dollar, assuming that 26 times as much (by weight) silver as gold must be used and that the bullion value of silver is 50 cents per fine ounce.
 2. The price level in the United States dropped 43 per cent during the fourteen months following May, 1920. \$60 million of Treasury notes bearing interest at 3% is issued in May, 1920 to mature in fourteen months with interest for the entire period. What amount would be paid under the "tabular" standard?
 3. Assume that Federal Reserve banks are required to maintain minimum gold reserves of 25% against Federal Reserve notes in circulation and against their deposit liabilities; that London banks are required to maintain minimum reserves of 10% which must consist of a deposit balance in the Bank of England; that the Bank of England must have a 20% gold reserve against its deposit liabilities.
- Calculate: (a) the actual gold reserve which would have been required of the twelve Federal Reserve banks at their last weekly statement date; (b) the actual gold reserve required in the Bank of England to back up Federal Reserve bank liabilities if the United States were on the gold exchange standard with a London bank as the depository.

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CHAPTER 3

Money in the United States

Money in the American colonies. The American colonies, handicapped by a scarcity of coins, experimented with many primitive mediums of exchange, including woodpecker scalps and dentalium shells in California, wampum in the East, bullets in New England, tobacco in Virginia, and skins on the western slopes of the Alleghanies.

There was a meager and heterogeneous circulation of coins from every important country in Europe, but the predominant position was finally won by the Spanish dollar. Along with both gold and silver coins from various countries, it was generally made legal tender. In 1652 Massachusetts established the first and only colonial mint, which later produced the famous pine-tree coins. Various colonies kept accounts in the moneys of their mother countries, and thus added to the general confusion. Shillings and pence, dalers and skillings, livres and sous, guilders and stivers competed with the Spanish dollar and real.

Many of the colonies issued paper money (bills of credit) which circulated at varying rates of discount. Paper bills were cut into pieces to make change. In 1763 the British Parliament strictly forbade the colonies to give legal-tender power to their bills, but no provision was made for supplying them with an adequate currency.

The Continental Congress, having no adequate taxing power, sought to finance the Revolution with paper money which it could not make even legal tender. These continental bills were declared redeemable in Spanish dollars or the equivalent in gold or silver. Before the war ended, the bills had become so nearly worthless that they gave rise to the expression "not worth a continental."

In 1790, Congress authorized the Treasury to accept them at the rate of 100 for 1, in payment for bonds of the new Federal government. The States vied with the Continental Congress in issuing paper money. As a result, the new nation was born in a welter of depreciated paper currency.

Money in the United States: 1792-1834. The Constitution empowers Congress to "coin Money, regulate the value thereof, and of foreign Com," and forbids the States to "coin Money; emit Bills of Credit; make any Thing but gold and silver Com a Tender in Payment of Debts." Both Jefferson and Hamilton recommended the establishment of a bimetallic system.

Congress adopted a bimetallic system in the Act of April 2, 1792. The new gold unit weighed 27 grains, eleven-twelfths fine, and thus contained $24\frac{3}{4}$ grains of pure gold; the silver unit was fixed at 416 grains, .8924 fine, and contained $371\frac{1}{4}$ grains of pure silver. This made the legal mint ratio 15:1.¹ Fractional silver coins of the same fineness and of weights proportionate to that of the silver dollar were provided. Heavy copper cents and half cents of 264 and 132 grains, respectively, were also provided. Because of the scarcity of coins, foreign coins were declared legal tender in 1793 for a period to end three years after the new mint began operation. This provision was renewed on numerous occasions, and foreign coins were not denied the right to circulate as money until 1857.

In 1793 the bullion market ratio corresponded to the American mint ratio; but the mint ratio of France was 15.5:1,² which meant that gold was valued more highly there than at the American mint. Furthermore, in 1799 the market ratio rose to an average of 15.74:1, and the annual average never again fell so low as 15:1. As a result, very little gold was presented for coinage in the United States.

Silver dollars were also withdrawn from circulation and exported to the West Indies, where they could be exchanged at par for the slightly heavier Spanish dollars. The latter were then melted down and taken to the mint for coinage into American dollars at a profit. President Jefferson, tired of operating the mint for the benefit of bullion dealers, discontinued the coinage of silver dollars in 1806, and none was coined thereafter until 1836.

From 1792 to 1834, metallic circulation in the United States was

¹ Actually, the first Director of the Mint made the silver coins .900 fine, with a fine silver content of 374.75 grains to the dollar, and thus made the ratio 15 14:1.

² While the legal ratio was 15.5:1 under the Act of 1803, the effective mint ratio was 15.69:1 because of differing mint charges on gold and silver coins.

limited almost entirely to a scanty supply of American fractional silver and minor copper coins, together with a mixture of foreign silver coins. Legally on a bimetallic standard, the country was hard pressed to find even silver enough for the requirements of trade.

A satisfactory bank note currency was provided by the first Bank of the United States, which was chartered in 1791 for 20 years, but its charter expired in 1811 and was not renewed by Congress. Thereafter, State-chartered banks of every description sprang up like mushrooms and flooded the country with depreciated bank notes. From 1814 to 1816 these banks generally suspended specie payments, and their notes depreciated to such an extent that coins were almost entirely driven out of circulation. Conditions improved during the life of the second Bank of the United States, 1816 to 1836. After 1818 New England bank notes were kept at par, and some of the other States improved their banking systems.

1834-1861. By the Act of June 28, 1834, Congress adopted a mint ratio of 16:1 by reducing the weight of the gold dollar to 25.8 grains, .899225 fine. An Act of January 18, 1837, changed the fineness of both gold and silver coins to .900, left the total weight of the gold dollar at 25.8 grains, and reduced the silver dollar to $412\frac{1}{2}$ grains, with fractional silver coins in proportion. This lowered the mint ratio to 15.99:1.

Silver was now undervalued at the mint just as it had previously been overvalued. France retained the 15.5:1 legal ratio,⁸ which meant that silver could more profitably be taken to the French mint than to Philadelphia, while the American mint was preferred for gold. The bullion market ratio averaged 15.73:1 during 1834, and the average did not go above 15.93:1 for any year until 1874. As a result, gold gradually replaced silver in the monetary stock. With the greatly increased gold production after 1848-1851 and the consequent rise in the relative value of silver, the United States was almost denuded of even fractional silver coins, because their bullion value was constantly higher than their coin value. This premium averaged 4.2 cents to the dollar through 1853.

By the Act of February 21, 1853, Congress took steps to relieve the famine in small change. Unlimited coinage of fractional silver coins was stopped. These coins were reduced to a subsidiary basis, and their weight was decreased by 6.91 per cent. Thus, two half

⁸Through changes in mint charges, the effective mint ratio was reduced from 15.69:1 to 15.626:1 in 1835, to 15.586:1 in 1850, and to 15.583:1 in 1854.

dollars, four quarters, and so on, contained 345 6 grains of fine silver, as compared with $371\frac{1}{4}$ grains in the silver dollar. The new coins could be kept in circulation, since their bullion value was slightly below their coin value.

While the United States continued on the bimetallic standard from 1834 to 1873, gold was the only standard coin that could be kept in circulation. Silver dollars were practically unknown, and small silver coins circulated only after they had been converted from a fractional to a subsidiary basis and reduced in weight.

1861-1873. Civil War financing put both North and South on a paper-money basis. Circulating notes issued by the Confederate Treasury and the various Southern States depreciated rapidly as the war went on and as the amounts outstanding increased. After the war was lost, these notes became worthless.

During the war the North issued 50 million dollars of demand Treasury notes, 450 million dollars of legal-tender United States notes (greenbacks), and 163 million dollars of interest-bearing Treasury notes (also legal tender). Both the banks and the Treasury had suspended specie payment even before the first issue of greenbacks was authorized on February 25, 1862.

Paper money of every kind depreciated rapidly after specie payment was suspended. Gold and silver coins were quickly driven out of circulation, and the North was left with no currency in denominations between the cent and the \$5 bill. The people were forced to use postage stamps to fill the void. Stamps were made legal tender. Both the Treasury and the banks issued fractional paper currency, and notes were cut into pieces to make change. Many cities and towns issued their own notes. All this was supplemented by private issues of paper currency ("shinplasters") put into circulation by every conceivable type of business concern.

In the attempt to check further depreciation of the greenback, Congress in 1864 forbade trading in gold futures and limited to ten days future commitments in foreign exchange. Within forty-eight hours after the Act was passed, the gold value of the greenback dollar fell from $\$.55\frac{1}{2}$ to $\$.43\frac{1}{2}$, and the law was promptly repealed.

Following the war the greenbacks were gradually retired until further contraction was stopped by an inflationist Congress in 1868, when 356 million dollars was still in circulation. Speculation in the greenback price of gold became a national pastime, climaxed by Jay Gould's attempt to corner gold and his failure on "Black Friday" (September 24, 1869). In the Panic of 1873 the Treasury

issued enough greenbacks to bring the total up to 382 million dollars

The Act of May 31, 1878, required the greenbacks to be reissued when redeemed or received in the Treasury; and the amount outstanding at that time, \$346,681,016, is still outstanding. The Treasury maintains a gold reserve of \$156,039,430.93 against these greenbacks and the \$1,149,558 of Treasury notes of 1890 outstanding. The latter are also secured by silver dollars in the Treasury. An Act of June 17, 1930, authorized the acceptance of United States notes in payment of customs dues.

By Acts of 1863 and 1864, Congress authorized the establishment of national banks, to be chartered by the Federal government and empowered to issue a sound bank note circulation. After 1866, when Congress imposed a tax of 10 per cent per annum on notes of banks other than national, bank note issue was monopolized by the national banks until the Federal Reserve banks were chartered in 1914. National bank notes circulated at par with greenbacks, in which they were redeemable.

The "crime of '73." Congress made a general revision of the coinage laws in the Act of February 12, 1873. No change was made in the gold coins, but all silver coinage was altered. The half-dime and three-cent silver coins were discontinued, and the weight of the remaining subsidiary silver coins was slightly increased.

The new law made no mention of the silver dollar. This probably was only a recognition of the fact that the coin had practically disappeared from the consciousness of the people. While some silver dollars had been minted in every year since 1858, their coin value had been below their bullion value ever since the adoption of the 16:1 ratio, and they had not circulated. In fact, they had been an insignificant part of the currency since President Jefferson's action in 1806. However, in subsequent silver controversies, Congress was accused of having deliberately killed the silver dollar, and the Act was later referred to as the "crime of '73."

The Act provided for a heavy "trade dollar," containing 420 grains of silver, .900 fine. This coin was intended primarily for use as a substitute for the Mexican dollar in trade with the Orient. However, unlimited coinage was authorized and, along with subsidiary coins, the new coins were made legal tender up to a value of \$5. The price of silver soon declined to a point where it became profitable to take bullion to the mint for coinage into trade dollars

for domestic circulation. Their legal-tender power was rescinded, and their coinage restricted in 1876. None was coined after 1883; in 1887 their further coinage was prohibited.

By the Act of 1873, bimetallism was legally discontinued in the United States, and the gold standard was formally adopted.

Decline of silver. Soon after 1873 the silver interests began to realize that a serious decline in the value of silver was threatened, and there ensued a battle for the restoration of silver to full monetary use—a battle which has lasted to this day. To understand developments in the United States, it is necessary to glance for a moment at what was taking place among the bimetallic countries in Europe.

The signatories to the Latin Monetary Union Treaty of 1865 (France, Italy, Belgium, and Switzerland) demoted all silver coins, except the five-franc piece, to a subsidiary basis, with limited coinage, limited legal-tender power, and reduced fineness. The German Empire, by its laws of 1871 and 1873, adopted the gold standard, and in the latter year began to sell the country's surplus stock of silver. In Austria and Italy, depreciated paper currencies drove both gold and silver out of circulation, and threw them on the bullion market. British India demanded less silver after 1866.

Coincident with this decrease in the monetary demand for silver, production increased steadily after 1874 and added to the rout of the white metal. At the same time, the value of gold was driven upward, and the relative value of silver therefore downward, by an increase in the world's monetary demand for gold, which outran even the increasing production. Bimetallic nations began to fear the complete disappearance of gold from their monetary stocks. The Latin Monetary Union, in 1874, limited the coinage of five-franc pieces to a definite quota for each of the four nations, and reduced the quotas in 1876. Coinage of five-franc pieces was stopped by Switzerland in 1875, and by France and Belgium a year later. In 1878 the treaty was revised to prohibit the minting of these coins until all four nations should agree to its resumption.

The following table, giving the average annual ratios of silver to gold in the market, will indicate how rapidly the relative value of silver declined after 1850, when the ratio averaged 15.10:1.

1860	15.20:1	1885	10.41:1	1910	38.22:1
1865	15.44:1	1890	10.75:1	1915	39.84:1
1870	15.57:1	1895	31.60:1	1920	15.31:1
1875	16.01:1	1900	33.33:1	1925	20.38:1
1880	18.05:1	1905	33.87:1	1930	53.39:1

Specie Resumption Act. The silver forces won their first victory in the Specie Resumption Act of January 14, 1875. This Act directed the Treasury to redeem greenbacks at par in gold after January 1, 1879.

It also ordered that subsidiary silver coins be minted "as rapidly as practicable" and paid out in redemption of fractional paper currency. However, the Secretary of the Treasury, Bristow, interpreted the mandatory provision as applying only to coinage of silver and not to paying it out. He had piled up in the Treasury about 16 million dollars of subsidiary silver coins (on a falling silver market) when Congress, by the Act of April 17, 1876, ordered him to pay out these coins, mint an additional supply, and continue this until all fractional paper currency was retired. But a shortage of small change had by this time driven the fractional paper currency to a premium, and little was presented for redemption. In July the Treasury was authorized to exchange silver coins for greenbacks up to 10 million dollars and to pay the coins out for the general purposes of the government as long as the amount of the coins plus fractional paper currency outstanding did not exceed 50 million dollars.

This legislation, coupled with a steady decline in the value of silver, restored the country's stock of subsidiary coins. While this meant a considerable increase in the monetary use of silver, its actual boon to the silver interests was less than expected, because the continued decline in silver led to an influx of old American silver coins that had been driven out of the country by Civil War inflation and had been in use as currency in South America for some fifteen years.

Bland-Allison Act. The Bland-Allison Act of February 28, 1878, was a more substantial victory for silver. It ordered the Secretary of the Treasury to purchase not less than 2 million dollars nor more than 4 million dollars worth of silver each month and to coin it into dollars containing, each, 412½ grains of silver, .900 fine. The new dollars were made full legal tender. The Act also provided that silver certificates in denominations not lower than \$10 might be issued against silver dollars deposited in the Treasury.

Although the Treasury consistently purchased the minimum amount required by law, more than 378 million dollars were coined before the Act was repealed in 1890, an average of over 30 million dollars a year. The bulky new dollars could not be kept in circulation except in the West and the South. Increasing amounts were

used in paying taxes to the Treasury, where they piled up. An Act of August 4, 1886, authorized the issuance of silver certificates in denominations under \$10; and as these found a ready demand in retail trade, the silver dollar was put into circulation by proxy.

Act of 1879. By 1878, subsidiary silver coins became so redundant that merchants were forced to dispose of them to brokers at a discount, and the Treasury was still issuing new coins in exchange for fractional paper currency. To correct this condition, the Act of June 9, 1879, was passed, providing that subsidiary silver coins could be exchanged at the Treasury, in multiples of \$20, "for lawful money of the United States," and that the coins should be reissued in the same multiples in exchange for lawful money. As a sop to the silver interests, the legal-tender power of the coins was raised from \$5 to \$10. This was of little, if any, importance. It was convertibility which thereafter enabled the public to regulate the circulating volume of each denomination according to its own requirements.

It should be noted that this law did not make subsidiary silver convertible into gold. The "Specie Resumption Act" of 1875 related only to the greenbacks. Silver dollars and certificates had not been made redeemable in gold, and, as they were "lawful money," the Treasury had the option of paying them when subsidiary silver was presented for conversion. Thus the United States had two moneys of redemption, two standards of value: the gold dollar, which was commodity money; and the silver dollar which, being inconvertible and having a coin value far in excess of its bullion value, was fiat money. In 1878 the bullion value of the silver dollar averaged \$.892; by 1890 the average had fallen to \$.809.

Sherman Silver-Purchase Act. Silver made a larger gain in the Sherman Silver-Purchase Act of July 14, 1890. This Act repealed the Bland-Allison Act as being too mild, and ordered the Secretary of the Treasury to purchase 4,500,000 ounces of silver each month. The silver was to be paid for with Treasury notes, which had full legal-tender power and were redeemable by the Treasury, at its option, in gold or in silver dollars to be coined from the bullion. Again, nothing was said about redeeming the silver dollar, nor was the Treasury required to coin the silver purchased. The Act was a bald subsidy to the silver interests. It left the country on the so-called "limping" standard, with one leg of gold and the other of fiat silver.

During the thirty-nine and a half months when this Act was in force, the Treasury issued nearly 156 million dollars of the "Treasury notes of 1890" and acquired enough bullion to coin over 225 million silver dollars. However, only a little more than 36 million dollars were coined. The Treasury adopted the policy of redeeming Treasury notes in gold. With 156 million dollars of Treasury notes added to an already redundant currency, the public began to show a preference for gold. An increasing percentage of tax payments consisted of Treasury notes, greenbacks, and silver instead of gold. Treasury notes, paid out in buying silver, were returned for redemption in gold; when the Treasury reissued the notes to pay current expenses, the notes were again returned for gold. Nothing could stop this "endless chain" so long as the Treasury continued to issue notes in payment for silver.

In the spring of 1893, the Treasury's gold reserve against the greenbacks fell below the presumed minimum of 100 million dollars. Confidence was shaken. Foreigners began to sell American securities on the New York Stock Exchange. India stopped free coinage of silver, and the price of the metal fell from \$.82 to \$.67 an ounce. A money panic followed. A special session of Congress, called by President Cleveland, repealed the Sherman Act on October 30, 1893.

Despite these body blows, the supporters of silver did not quit. Bimetallism, with a ratio of 16:1, was the principal issue in the Presidential campaign of 1896. If silver had won, the United States mint would have been working against a bullion market in which the average ratio for that year was 30.59:1. However, silver lost the election.

"Gold Standard Act." On March 13, 1900, Congress passed the so-called "Gold Standard Act," which declared the gold dollar to be the standard unit of value, and instructed the Secretary of the Treasury to maintain all forms of money "at a parity" with gold. While redemption of silver in gold was not specified, it was considered to be implied by the "parity" clause, and provision was made in the Act for the establishment and maintenance of a gold reserve of 150 million dollars for the redemption of greenbacks and Treasury notes of 1890.

Federal Reserve Act. In the Federal Reserve Act of December 23, 1913, Congress authorized the establishment of Federal Reserve banks with power to issue two kinds of circulating notes. The first and most important was the Federal Reserve note, which is issued under provisions that make possible its expansion and contraction

in response to the changing requirements of trade. The second was the Federal Reserve bank note, which was originally intended to replace the national bank note and to be of the same general character as that note.

Pittman Act. To provide silver for payment to India during the First World War, Congress passed the Pittman Act on April 23, 1918. It authorized the Treasury to melt 350 million silver dollars and to sell the bullion at not less than \$1 an ounce; ordered the cancellation of silver certificates in amount equal to the number of dollars melted; and, to keep peace with the silver interests, provided that after the war the Treasury was to purchase American-mined silver at \$1 an ounce in an amount sufficient to replace the metal sold. About 209 million ounces were melted and later replaced. In the meantime the cancelled silver certificates were partially replaced in circulation with Federal Reserve bank notes.

Gold standard during the First World War. The First World War drove all of the belligerent countries, except the United States, completely off the gold standard, and Europe was flooded with inconvertible paper money. The outstanding note issue of the German Reichsbank was increased from about 2 billion marks in 1914 to about 1,500 quintillions (1,500,000,000,000,000,000) in 1923. When the Reichsbank was reorganized in 1924, it redeemed the old marks in new reichsmarks at the rate of one trillion for one. Other countries, such as Austria-Hungary and Russia, had similar experiences. Before resuming gold payments in 1928, France reduced the gold content of the franc by about 80 per cent. England established a gold bullion standard in 1925 without devaluation.

The United States placed an embargo on gold from September 7, 1917, to June 9, 1919. While gold was available for domestic purposes during this period, the industrial arts were subjected to a quota, and the circulation of gold coin was discouraged. During the embargo, substantial amounts of gold were set aside in the vaults of the Federal Reserve banks and earmarked as the property of certain foreign governments and central banks, notably Argentina.

Post-war gold standards. After the war, most of the world struggled back to the gold standard in one form or another. To accomplish this with the least possible contraction of credit, various plans for economizing gold were devised. Gold bullion and gold exchange standards were adopted with various modifications. Most of the gold which had been withdrawn from circulation and

concentrated in the treasuries and central banks during the war was kept there, where it could serve as a reserve against government and bank credit. Several additional countries established central banks, and central banks were generally given a monopoly, or near-monopoly, of note issues.

Commercial banks were permitted to count the circulating notes and the deposit liabilities of central banks as legal reserve against their own liabilities, while the central banks in turn were required to maintain against their notes and deposits only a fractional reserve in gold. Some central banks were also allowed to count as legal reserves bank deposits and short-term investments payable in foreign countries that were on the gold standard, and some were given the option of redeeming their liabilities in gold or gold exchange. These foreign credits, in turn, were in some instances backed by fractional reserves consisting of central bank obligations against which only fractional gold reserves were held.

The gold standard nations continued this pyramiding of credit upon gold until they had outstanding about \$7 in credit money and demand bank deposits for every \$1 in monetary gold, as compared to a ratio of about 4:1 which had prevailed before the war. The non-gold cover for credit money and demand deposits consisted mainly of bonds, bills of exchange, and promissory notes of business concerns. A widespread attempt to convert circulating notes and bank deposits into gold in any country soon pressed severely upon the gold reserve and forced the liquidation of bank assets. In turn, the decline in prices, which always accompanies forced liquidation, threatened the solvency of banks and compelled them to suspend specie payments. The weaker debtor nations were especially vulnerable in this respect, because, despite their paucity of gold, they were subjected to continual demands for making payments to creditor nations.

The sense of strain and uneasiness which pervaded many parts of the world caused banks and others to keep large amounts of capital in liquid form. This capital was shifted about from one country to another in search of a haven where it would be safe and yet earn some return. The sudden withdrawal of these large sums added to the normal difficulties of any system of banking and currency already in distress, and subjected even the stronger nations to embarrassment. It was an easy matter for a money or banking panic to spread rapidly from one debtor country to another and finally into creditor countries.

In May, 1931, the dominant bank in Austria, the Credit Anstalt, was discovered to be in serious difficulty. Panic spread through southeastern Europe and soon reached Germany, where the bank suspension became general in July. Foreigners immediately began to withdraw their deposits and to liquidate their short-term credits in London, because of the general alarm and the fear that Great Britain might be affected by the losses in Central Europe. On September 21, England, after desperate efforts to maintain the gold standard, was forced to abandon it. The Scandinavian countries and nearly all of the British dominions and colonies followed suit. Other European nations, fearing that a formal abandonment of the standard might lead to the disastrous inflation with which they had recently been all too familiar, imposed a strict regulation on foreign exchange transactions and gold movements that was tantamount to leaving the standard. By the end of 1932, only six nations were left on the gold standard: the United States, France, Belgium, Switzerland, Holland, and Poland.

American crisis. When England suspended specie payments in September, 1931, the United States had the largest gold stock previously held by any nation, nearly 5 billion dollars (of 25.8 grains), or more than 40 per cent of the world's entire monetary stock of gold. Within six weeks 725 million dollars was exported. At the same time the country was afflicted with an epidemic of bank failures. Over eighteen hundred banks, with more than 1,300 million dollars in deposits, failed within six months. In the following May, foreigners again lost faith in the dollar, and an additional 450 million dollars of gold was exported during May and June. The monetary gold stock was driven below 4 billion dollars before the tide was turned. This practically exhausted foreign balances in the United States, and so further gold withdrawals were not feared. In fact, gold imports during the last half of the year raised the gold stock to 4.5 billion dollars at the end of 1932.

The turn in the tide of gold movements, coupled with various emergency measures, restored confidence in some degree; and the last half of 1932 was a period of comparative calm, on the surface. Underneath, the crisis was gathering force, preparing for the final eruption. Mayors of various cities and towns declared holidays to save embarrassed banks from the necessity of paying out cash. On October 31, 1932, the Lieutenant-Governor of Nevada declared a bank holiday for twelve days throughout the state, and this was renewed from time to time. In January of 1933, Iowa authorized

the Superintendent of Banking to operate banks in receivership on a restricted basis. Louisiana declared a holiday on February 4 to aid a large bank in New Orleans that was in difficulty. Uneasiness over the banks spread rapidly. On February 14, Michigan declared a bank holiday for one week. This was the beginning of the final crash. On February 25, Maryland declared a holiday. Seven additional states fell in line by March 1.

In the meantime, monetary circulation had expanded. The bank runs of 1931 had resulted in an enormous increase in the public demand for currency. At the end of that year, money in circulation, outside the Treasury and Federal Reserve banks, was about 700 million dollars above the normal year-end peak of 5 billion dollars that had prevailed during prosperous years. Seasonal contraction during the first quarter of 1932 was more than offset by further expansion during the May-July disturbance, after which there was a slight decline in circulation to the end of the year.

Although the average circulation in 1932 was fully a billion dollars above the level of 1930, and three-quarters of a billion above the levels of earlier prosperous years, encouragement was taken from the failure of circulation to expand normally during the pre-Christmas period of 1932. It was especially noted that, all through the disturbances of 1929 to 1932, the public had generally been satisfied to accept bank note currency when liquidating bank deposits. Gold had not been demanded at home on any large scale, despite the distrust of the dollar that had been evidenced abroad during 1931 and 1932. The amount of gold coin and gold certificates in circulation was actually less at the end of 1932 than it had been in June, 1931.

The turn of the year brought a radical change. Only a negligible amount of currency was returned from circulation in January, 1933. Circulation increased by 900 million dollars in February, and there was an increasing demand for gold. During February 150 million dollars of gold and gold certificates went into general circulation or hoarding. People everywhere were attempting to convert bank deposits into cash, with gold preferred. The large banks of New York and Chicago, which had maintained a liquid position and paid deposits on demand, were now drawn upon by country banks and large corporations for currency to circulate throughout the areas in which banks were being closed. During the nine days ended March 3, money in circulation increased more than 1.5 billion dollars; about 200 million dollars in gold was paid

out by Federal Reserve banks to hoarders, and some 225 million dollars was exported or earmarked for foreign account, mainly to cover flight of American funds from the dollar. On March 8, total monetary circulation was estimated to be in excess of 7.5 billion dollars, the highest on record up to that time.

On March 4, 1933, Presidential Inauguration Day, the Governor of New York declared a state-wide bank holiday for two days; other States followed the lead of New York, and practically every bank in the country that was still open closed its doors on the same day.

Suspension of the gold standard. President Franklin D. Roosevelt's first official act was to issue the Proclamation of March 6, closing all "banking institutions" in the United States for four days and forbidding them, during suspension, to pay out, export, or earmark any "gold or silver coin or bullion or currency" or to deal in foreign exchange. The Proclamation of March 9 extended the holiday indefinitely. While this order did not prohibit exportation of gold by persons other than "banking institutions," it forbade those institutions (including Federal Reserve banks) *either to export or to pay out* gold and was therefore, for all practical purposes, a suspension of the gold standard.

The President immediately called a special session of Congress which met on March 9 and on that day passed the Emergency Banking Act. This Act approved and confirmed the action previously taken by the President; specifically authorized him, during a time of war or national emergency, to regulate or to prohibit transactions in foreign exchange and the "export, hoarding, melting or earmarking of gold or silver coin or bullion or currency"; and empowered the Secretary of the Treasury to require all persons to deliver to him all gold coin, gold bullion, and gold certificates owned by them, in exchange for an equivalent amount of any other form of money issued under the laws of the United States. This act also authorized the Comptroller of the Currency to place conservators in charge of weakened national banks, with power to operate such banks on a restricted basis; provided that a national bank might strengthen its capital structure by the sale of preferred stock to the Reconstruction Finance Corporation or others; and greatly liberalized the powers of Federal Reserve banks to issue circulating notes.

A reopening of the banks was started on March 13, and by the end of the month about two-thirds of the commercial banks that had been open before the holiday resumed operation. But the

Executive Order of March 10, which authorized this action, forbade *all persons* to export gold coin, gold bullion, or gold certificates except under Treasury regulation or license. The Order also prohibited banks to pay out gold or gold certificates, except as authorized by the Secretary of the Treasury, or to "allow withdrawal of any currency for hoarding" Further, it forbade any banking institution to "engage in any transaction in foreign exchange, except such as may be undertaken for legitimate and normal business requirements, for reasonable traveling and other personal requirements, and for the fulfillment of contracts entered into prior to March 6, 1933."

"Nationalization" of gold. On March 8 the Federal Reserve Board requested the Federal Reserve banks to begin listing the names and addresses of persons who had withdrawn gold from banks since February 1. A sequel to this and to the Emergency Banking Act of March 9 was the Executive Order of April 5, forbidding the hoarding of gold. This Order required all persons to deliver to a Federal Reserve bank or an agent thereof all gold coin, gold bullion, and gold certificates owned by them, with minor exceptions, and to receive in exchange therefor any other form of money issued under the laws of the United States. The gold standard had already been suspended. This "nationalization" of gold certificates (as well as of gold coin and bullion) served notice that the government had no intention of resuming the redemption of certificates in gold, for the government seized possession of the certificates themselves.

On April 20 there was issued an Executive Order which confirmed the gold embargo laid down by the Proclamation of March 6 and the Executive Order of March 10, and restricted the discretionary power of the Secretary of the Treasury to license gold exportation, by requiring that any licensing, except for certain specified purposes, should be subject to approval by the President. This Order also confirmed and strengthened the foreign exchange restrictions contained in the Order of March 10, by authorizing the Secretary of the Treasury to regulate, by means of licenses or otherwise, any transactions in foreign exchange, transfers of credit from any banking institution within the United States to any foreign branch of such institution or to any foreign bank, and the export of currency by any person.

Inflation Act. By passing the Thomas Amendment (commonly called the "Inflation Act") to the Farm Relief Act on May 12, 1933,

Congress further indicated the intention not to return to the old gold standard. This Act authorized the President to change the weight of the gold dollar, subject to a proviso that he could not reduce the weight by more than 50 per cent. The President was also given the following additional discretionary powers:

(1) By negotiation, to arrange for the Federal Reserve banks to purchase and hold for an agreed period, up to 3 billion dollars of United States Government securities in addition to those already held;

(2) To direct the Secretary of the Treasury to issue 3 billion dollars of United States notes (greenbacks), with the limitation that they should be used only in retiring public debt and that they themselves should be retired at the rate of 4 per cent per annum;⁴

(3) To change the weight of the silver dollar, and to provide for the unlimited coinage of silver, as well as gold, at a fixed mint ratio;⁵

(4) To accept up to 200 million dollars worth of silver, at a price not to exceed 50 cents an ounce, in payment of the debts of foreign governments to the United States, with the proviso that silver certificates in amount equal to such debt payment be issued and kept in circulation.

It will be noted that all of these extraordinary, inflationary powers were discretionary and that the President was charged with the sole responsibility of determining when and the extent to which any of them should be exercised, if at all.

The Act also empowered the Federal Reserve Board, upon the affirmative vote of not less than five members and with the approval of the President, to declare that "an emergency exists *by reason of credit expansion*" and, during such emergency, to increase or decrease the reserves which member banks in the Federal Reserve System were required to maintain against their deposits. The terms of this provision would seem, at first glance, to have limited changes in reserve requirements to periods of excessive credit expansion and to have made the provision, therefore, entirely a deflationary measure; but the proved ingenuity of administrative officials in interpreting the law could conceivably have turned it into a most effective tool of inflation.⁶

Having authorized the establishment of a bimetallic standard, as

⁴ Authority terminated by Wagner-Spence Act, June 12, 1945.

⁵ Authority expired by limitation, June 30, 1943.

⁶ This authority terminated by the Banking Act of 1935.

indicated in the paragraph numbered (3) above, Congress at the same time declared that the gold dollar "shall be the standard unit of value," and repeated the parity clause, charging the Secretary of the Treasury with the duty of maintaining at a parity with the gold dollar all forms of money issued or coined by the United States.

The Act also provided that "all coins and currencies heretofore or hereafter coined or issued by or under the authority of the United States shall be legal tender for all debts public and private." Thus, for the first time, full legal-tender power was conferred upon every kind of currency circulating in the country.

Gold clause annulled. Painful experiences in the past with depreciated and debased currencies had led to the inclusion of gold clauses in various long-term contracts, such as bonds issued by governments, municipalities, and corporations. A common and simple form of clause was the debtor's pledge, given at the time the obligation was incurred, to pay the stated sum in "gold dollars of the present standard of weight and fineness."

A Joint Resolution of Congress, approved June 5, 1933, annulled the gold clause in so far as it concerned obligations payable in dollars. This Resolution:

(1) Declared every provision giving "the obligee a right to require payment in gold or a particular coin or currency of the United States, or in an amount in money of the United States measured thereby," to be against public policy;

(2) Forbade the use of the gold clause in the future; and

(3) Provided that "every obligation, heretofore or hereafter incurred," whether or not it contains a gold clause, "shall be discharged upon payment, dollar for dollar, in any coin or currency which at the time of payment is legal tender for public and private debts."

All obligations of the United States Government, except currency, were included in the general annulment. Various obligations of the Federal government, outstanding at the time this Joint Resolution was passed and approved, contained a pledge to pay in gold dollars weighing 25.8 grains, .9 fine. The Resolution was therefore a repudiation of the government debt to the extent that dollars actually paid on these obligations in the future might fall short of the value of 23.22 grains of pure gold. In conjunction with the so-called "Inflation Act," the Resolution authorized a 50 per cent repudiation.

The Resolution amended the "Inflation Act" by specifically listing among the currencies having full legal-tender power circulating notes issued by Federal Reserve and national banks, and by providing that gold coins, when below the standard weight and limit of tolerance prescribed by law, shall be legal tender only at a valuation in proportion to their actual weight.

Gold Reserve Act of 1934. The foundation of a new monetary system was laid down in the Gold Reserve Act of 1934, approved January 30. The Act contained the following provisions relating to gold and silver:

(1) Title to all gold coin and bullion held by Federal Reserve banks was transferred to the United States. For every dollar in gold (of 23.22 grains fine), the banks were to receive on the books of the Treasury a credit of one dollar, payable in gold certificates.

(2) Further coinage of gold was forbidden, except for foreign countries, and it was declared that no gold coin should thereafter be paid out or delivered by the United States. It was also ordered that all gold coin of the United States be withdrawn from circulation and, together with all other gold owned by the government, be formed into bars of such weights and fineness as the Secretary of the Treasury might direct.

United States Mint practice is to cast gold into melts or blocks of 18-22 bars, each bar averaging about 400 ounces in weight, with fineness certified only for the melt as a whole. Broken blocks are considered mutilated and must be reassayed. Bars obtained from melting United States coin average about .900 fine; those from British coin, about .916 fine. The bulk of the world's monetary gold is now being cast from new gold in blocks averaging a fineness of .995, or higher, and having a value of about \$14,000. Bars running between 380 and 420 ounces are "good delivery" in world trade.

(3) The Act provided that no currency of the United States (including circulating notes issued by Federal Reserve and national banks) should thereafter be redeemed in gold, except to the extent permitted by regulations issued by the Secretary of the Treasury with the approval of the President; and except that gold certificates owned by Federal Reserve banks should be redeemed in gold at such times and in such amounts as might, in the judgment of the Secretary of the Treasury, be necessary to maintain all United States currency at par with gold. Redemptions were to be made

only in gold bullion equivalent, at the time of redemption, to the currency surrendered.

(4) The "Inflation Act" was amended as follows:

(a) The President's power to alter the weights of the gold dollar and the silver dollar, and to provide for the unlimited coinage of both at a fixed mint ratio, was limited to a period of two years, beginning January 30, 1934, subject to an extension of one year by Presidential proclamation. Later Acts of the Congress extended this power to June 30, 1943, at which time it expired by limitation.

(b) It was stipulated that the only permissible change in the weight of the gold dollar was to reduce its weight by not more than 50 per cent nor less than 40 per cent.

(c) The President was authorized to issue to persons bringing silver bullion to the mint for coinage silver certificates in amount equal to the number of coined silver dollars to which they would be entitled, to issue silver certificates against any silver in the Treasury not held for the redemption of outstanding silver certificates, and to coin standard silver dollars or subsidiary currency for the redemption of such certificates; to prescribe different terms and conditions, and to make different charges, or to collect different seigniorage, for the coinage of silver of foreign production than for the coinage of silver produced in the United States or its dependencies (that is, to pay a different price for silver of domestic origin than for silver of foreign origin); and "to reduce the weight of subsidiary coins so as to maintain the parity of such coins with the standard silver dollar and with the gold dollar."

(5) For a period of two years, subject to an extension of one year by the President, later extended by amendments to June 30, 1945, the Secretary of the Treasury was authorized to deal in gold, foreign exchange, and other instruments of credit and securities to the extent necessary to stabilize the exchange value of the dollar. It was provided that any increase in the value of gold held by the United States, that might accrue from reduction in the weight of the gold dollar, should be taken into the Treasury as a miscellaneous receipt. Of the total increment of \$2,818,807,826.61, two billion dollars was set aside as an Exchange Stabilization Fund, with the understanding that any of this Fund not currently required to stabilize the exchange value of the dollar might be invested in direct obligations of the United States.

The Exchange Stabilization Fund of two billion dollars was es-

established when the President issued a proclamation on January 31, 1934, one day after the bill became law. The Treasury was thus provided with a large fund with which to smooth out temporary fluctuations in exchange rates. It will be noted also that this Fund was made available for supporting the market in Government securities if such support should be deemed necessary.⁷

(6) Without any time limit, the Secretary of the Treasury was authorized to buy and to sell gold, at home or abroad, "at such rates and upon such terms and conditions as he may deem most advantageous to the public interest," provided that gold required as reserve or security for currency issued by the United States might be sold only to the extent necessary to maintain the parity of such currency with the gold dollar.

This provision is more significant than is generally realized. If the Treasury should stop the paying out of gold for exportation and should then begin to buy gold abroad at rising prices, the result would be a decline in the value of the dollar in relation to all gold currencies and also in relation to all other currencies which did not decline as rapidly as the dollar in relation to gold. This would be tantamount to reduction in the gold content of the dollar, and it will be noted that there is no limitation as to time or extent upon the power to use this method of devaluation or debasement except as may become effective under the Bretton Woods Agreement.

(7) The acquiring, transporting, melting or treating, importing, exporting, and earmarking of gold were forbidden, except under regulations prescribed by the Secretary of the Treasury with the approval of the President.

The chief provisions regarding paper currency were as follows:

(1) The Secretary of the Treasury was authorized to issue gold certificates against any gold held by the Treasurer of the United States except the gold held as reserve for greenbacks and Treasury notes of 1890; and the President was authorized to issue silver certificates, as indicated in the paragraph numbered (4)(c) above.

(2) Provision was made for reducing the weight of gold, held as reserve or security for gold certificates, greenbacks, and Treasury notes of 1890, in proportion to any reduction that might be made in the weight of the gold dollar. Gold thus released was to be taken into the Treasury as a miscellaneous receipt; and, in the event that the weight of the gold dollar be later increased, the resulting decrease in the value of gold held as reserve or security

⁷ All powers referred to under (5) expired by limitation, June 30, 1945.

against gold certificates, greenbacks, and Treasury notes was to be compensated by transfers of gold bullion from the general fund.

(3) Federal Reserve notes were made redeemable in lawful money instead of in gold. The term "lawful money" is not defined by law, but the courts have held that the term includes any money that is declared by the laws of the United States to be legal tender.

(4) Gold certificates were substituted for gold (a) as collateral security for Federal Reserve notes, (b) in the legal reserve requirements of Federal Reserve banks, and (c) in the redemption fund against Federal Reserve notes. However, they could not be paid out into general circulation.

(5) The Secretary of the Treasury was authorized to issue receipts for gold or gold certificates deposited in the Treasury by any Federal Reserve bank or Federal Reserve agent, such receipts to be redeemable in gold certificates at the Treasury and to be counted as legal reserve against the Federal Reserve note and deposit liabilities of Federal Reserve banks.

Devaluation of the gold dollar. Acting under authority of the "Inflation Act" and the Gold Reserve Act of 1934, the President issued a Proclamation on January 31, 1934, reducing the weight of the gold dollar from 25.8 grains to 15 $\frac{5}{21}$ grains, with the fineness unchanged at .900. Thus the pure gold content of the dollar was reduced from 23.22 grains to 13 $\frac{5}{7}$ grains (59.06+ per cent of its previous content).

The Gold Reserve Act authorized the President to reduce the weight of the gold dollar to any point between 50 per cent and 60 per cent of its former weight, and provided that any such change could be made only during a period of two years following the effective date of that Act, January 30, 1934, "unless the President shall sooner declare the existing emergency ended, but the President may extend such period for not more than one additional year by proclamation recognizing the continuance of such emergency."⁸

The weight of the silver dollar was not altered by the Proclamation.

Restoration of silver. In the tremendous monetary changes of 1933-1934, silver regained much of the ground lost after 1873. The Inflation Act (May 12, 1933) gave the President discretionary power to restore unlimited coinage of silver in the United States under a bimetallic system, or otherwise to increase the monetary use of silver. At the World Economic and Monetary Conference

⁸This authority expired by limitation, June 30, 1943.

in London (July 20, 1933), the representatives of sixty-six governments unanimously adopted a resolution presented by the American delegation; this resolution pledged their governments to abandon the practice of melting or debasing silver coins and to enact no legislation that would lower the value of silver.

At the same time a supplementary agreement was arranged between the three large silver-using countries (China, India, and Spain) and the five chief producers of silver (Mexico, United States, Canada, Peru, and Australia) to protect the value of silver. China agreed not to sell any silver derived from the melting or debasement of silver coins. India and Spain agreed that during a four-year period beginning January 1, 1934, they would not sell more than 35 million and 5 million ounces per annum, respectively, and would thereafter subject themselves to the general resolution adopted at the London Conference. The five producing countries agreed that during the four-year period they would absorb from their respective mines an aggregate of 35 million ounces of silver per annum, and would keep it off the world market. Of this total, the United States agreed to absorb not less than 24,421,410 ounces per annum.

In a Proclamation of December 21, 1933, the President directed the mints to receive any silver produced after that date from mines in the United States or its dependencies; to coin one-half of such silver into standard silver dollars; and to pay for the silver received, with silver dollars, at the rate of 64½ cents per ounce, that being one-half of the coinage value of an ounce of silver. In subsequent Proclamations, the President, under authority of the Inflation Act, as amended by the Gold Reserve Act of 1934, fixed varying seigniorage percentages, or prices, for domestic silver mined during different periods. By the Act of July 6, 1939, the Congress made the purchase of domestic silver mandatory at the price of 71.11 cents per ounce for such silver mined after July 1, 1939. Recent changes in the mint price of newly mined domestic silver follow:

<i>Proclamation of</i>	<i>Production Period</i>	<i>Seigniorage Percentage</i>	<i>Mint Price</i>
Dec. 21, 1933	Dec. 21, 1933 to Apr. 10, 1935.....	50	64.5¢
Apr. 10, 1935	Apr. 10, 1935 to Apr. 24, 1935.	45	71.11¢
Apr. 24, 1935	Apr. 24, 1935 to Dec. 21, 1937.	40	77.57¢
Dec. 30, 1937	Jan. 1, 1938 to June 30, 1939	50	64.5¢
Dec. 31, 1938			
<i>Act of</i>			
July 6, 1939	July 1, 1939 to Aug. 1, 1946.	45	71.11¢
July 31, 1946	After Aug. 1, 1946	30	90.5¢*

* Plus or minus ¢¢ per ounce handling charge.

Silver Purchase Act of 1934. In the Silver Purchase Act of 1934 (approved June 19), Congress declared it to be the policy of the United States that one-fourth of the *monetary* value of the country's monetary stocks of gold and silver shall ultimately consist of silver. The Secretary of the Treasury was authorized and directed, in his discretion, to purchase silver at home or abroad, until the desired proportion shall have been attained, with two provisos: (a) no silver to be bought at a price higher than its monetary value, then \$1.2929+ per fine ounce; and (b) not more than 50 cents an ounce to be paid for silver situated in the continental United States on May 1, 1934.

The Act also authorized the Secretary of the Treasury to issue silver certificates in amount not less than the cost of the silver purchased, and directed that "such certificates shall be placed in actual circulation." All silver certificates were declared to be full legal tender and redeemable at the Treasury in standard silver dollars. The Secretary was authorized to coin silver dollars necessary for such redemption. He was also authorized to sell, at home or abroad, with the approval of the President, any silver acquired under the Act, which was not required to be held as security for silver certificates, whenever the market price of silver exceeded its monetary value or whenever the monetary value of the silver stock was greater than 25 per cent of the monetary value of the combined stocks of gold and silver.

The Act empowered the Secretary of the Treasury, with the approval of the President, to regulate, by means of licenses or otherwise, the acquisition, importation, exportation, or transportation of silver. The President was authorized, at his discretion, to require the delivery of all silver to the mints and to pay for it a fair market price.

On June 28, 1934, the Secretary of the Treasury issued an order requiring licenses for further exportation of silver, with certain exceptions.

"Nationalization" of silver. On August 9, 1934, the President issued a Proclamation and an Executive Order concerning silver. Together, they required that all silver then in the continental United States, with certain exceptions, be delivered to the mints; that the silver so delivered be coined or held in the monetary stock as bullion for later coinage as it might be needed; and that the silver be paid for, with any coin or currency of the United States, at the price of 50.01 cents per fine ounce.

This Order did not alter the terms of the Proclamation of December 21, 1933, under which the mints were to pay 64½ cents per ounce for silver produced after that date from mines in the United States and its dependencies, except that any such silver not delivered under the Proclamation should, if processed to a fineness greater than eight-tenths after August 9, be delivered under the terms of the Order (at 50.01 cents per fine ounce). Nor did the Order affect any silver imported after August 9; but importation had previously been placed under Treasury regulation by the Silver Purchase Act.

In 1938, the Government changed its policy as to silver other than newly mined domestic silver. On April 29 of that year, the President, by proclamation, revoked the Proclamation of August 9, 1934, except as the latter applied to newly mined domestic silver, and the Secretary of the Treasury revoked his Order of June 28, 1934, and the Silver Regulations of August 17, 1934. By these actions, the restrictions imposed by such orders upon the importation and exportation of silver were removed. As previously noted, the Act of July 6, 1939, made the purchase of domestic silver mined after that date mandatory, at the price of 71.11 cents per ounce.⁹

An Act of July 12, 1943, as later amended, authorized the President, between that date and December 31, 1945, to sell or lease silver for domestic purposes for a period to expire within six months after the cessation of hostilities, provided (1) that no silver should be sold at less than 71.11 cents per ounce and (2) that there should be no sale or lease of silver pledged to secure outstanding silver certificates.

New monetary system. The result of all these changes has been to give the United States a highly restricted, international, executive, gold bullion standard. These qualifications of the standard require some explanation.

The gold dollar is declared to be the standard unit of value, but no gold is coined. Hence, the gold bullion standard.

No currency may be redeemed in gold, except under Treasury regulation and except that "gold certificates owned by the Federal Reserve banks shall be redeemed at such times and in such amounts as, in the judgment of the Secretary of the Treasury, are necessary to maintain the equal purchasing power of every kind of currency of the United States."

⁹ Act of July 31, 1946, sets mandatory price of 90.5 cents per ounce. (The Treasury adds or deducts one-half cent per ounce handling charge.)

The standard is qualified as "international" because it has been the policy of the government to redeem currency in gold only for the purpose of making payments to foreign countries. On January 31, 1934, the Secretary of the Treasury announced that, until further notice, he would sell gold for export to foreign central banks whenever the United States exchange rates with gold-standard countries reached the gold export point—the price to be \$35 per fine ounce plus one-quarter of one per cent handling charge. On the next day, he announced that he would buy foreign or domestic gold, delivered to the Treasury or its designated agencies, at the price of \$35 per fine ounce less one-quarter of one per cent for handling charges.

The announcement with regard to selling gold was withdrawn November 24, 1936. From the enactment of the Gold Reserve Act to this withdrawal date, there had been an almost uninterrupted flow of gold into the United States, and demand for export had at no time been sufficiently heavy to provide a real test of the announced policy regarding sales. Net importation of gold was \$1,134 million in 1934, \$1,739 million in 1935, and \$1,117 million in 1936.

On October 13, 1936, the Secretary announced that, subject to revocation or alteration on twenty-four hours' notice, he would sell gold for immediate export to, or earmark for the account of, the exchange equalization or stabilization funds of those countries whose funds would likewise sell gold to the United States on a satisfactory basis. He named England and France as countries then complying with the specified conditions, and announced that the names of other countries would be published as they qualified. Belgium, Switzerland, and The Netherlands were added to the list on November 24, 1936. The nation's gold stock increased even more rapidly during the next three years, until, at the end of August, 1939, just before the outbreak of the war in Europe, it was more than double the stock of 1934.

The so-called Bretton-Woods Agreement, if generally adopted in original form, would supply further reason for qualifying the United States standard as international in character. However, at the time of this writing, the full effect of the Agreement cannot be estimated.

The term "executive" standard is used because the executive branch of the government has been given such great power over the monetary system. The ownership, transportation, melting or

treating, importing, exporting, and earmarking of gold are subject to Treasury regulation.

The power of the Secretary of the Treasury, without limit as to time or extent, to buy and sell gold, at home or abroad, at such prices and upon such terms "as he may deem most advantageous to the public interest," could be employed in reducing or raising the value of the dollar in terms of gold just as effectively as if the gold content of the dollar were reduced further or increased. Thus the Executive was not limited to a range between a "fifty-cent dollar" and a "sixty-cent dollar," as was popularly believed, but may, at will, decree a "ten-cent dollar," or a "one-cent dollar," or a "two-hundred-cent dollar."

The Secretary of the Treasury is authorized to buy silver at home or abroad at any price not exceeding its monetary value (now \$1.2929+ per fine ounce) as long as the proportion of silver in the country's stocks of gold and silver is less than one-fourth of the total monetary value of such stocks.¹⁰ He is, by implication at least, instructed not to sell except at a price above the monetary value or except at a time when silver stocks are above the one-fourth ratio—with the further exception that sales might be made during the war emergency at a price not below 71.11 cents. Seigniorage profit from silver purchases may be coined or held as bullion, and silver certificates may be issued against such silver coin or bullion held in the Treasury. While the country's monetary stock of silver has been increased substantially through extravagant purchases, the stock of gold has grown at a faster rate, so that silver has made no net progress toward its goal.

All coins and currencies of the United States (including notes issued by the Federal Reserve banks and national banks) are full legal tender for all debts public and private.

An important aspect of the new monetary system is the inherent possibility of tremendous inflation, coupled with the fact that the power to control the kinds and amounts of currencies issued is lodged with the Executive instead of with a central bank authority. History provides ample reason for the fear that political officials yield more readily than will a central bank to the fatal, seductive charms of paper money inflation. However, fairness demands that judgment, in any particular case, be suspended until actual policies

¹⁰ There seems to be a contradiction between this authorization (found in Section 3 of the Silver Purchase Act of 1934) and Section 4 of the Act of July 6, 1933 (Public No. 165-76th Congress), which orders the Mint to purchase domestic silver mined after July 1, 1933, at the price of 71 1/2 cents per ounce.

and practices have been fully revealed. In some quarters the new monetary system is defended on the ground that it is in step with the modern, so-called "controlled currency" systems that have been adopted by certain other countries. Modernity in a currency system is not necessarily a virtue. Experience with so-called "controlled" systems is yet too limited to demonstrate whether they may or may not turn out to be uncontrollable. Candor compels the admission that, if "controlled currency" proves really to be controllable, an important advance may be made in monetary affairs. History warns that the risks of the experiment are great, whatever may be the expected benefits.

The following table shows the relative amounts of different kinds of money in circulation (outside the Treasury and the Federal Reserve banks) at the end of 1933, just before the nationalization of gold, and at a recent date:

KINDS OF MONEY IN CIRCULATION, OUTSIDE THE TREASURY AND
FEDERAL RESERVE BANKS

(Millions of Dollars)

	<i>December 31, 1933</i>	<i>At Recent Date</i>	<i>Increase (+) or Decrease (-)</i>
Gold coin	311	...	(-) 311
Gold certificates	213	52	(-) 161
Standard silver dollars	29	123	(+) 94
Silver certificates	407	1,652	(+) 1,245
Treasury notes of 1890	1	1	...
Subsidiary silver	272	784	(+) 512
Minor coin	117	290	(+) 173
United States notes (greenbacks)	286	322	(+) 36
Federal Reserve notes	3,044	22,651	(+) 19,607
Federal Reserve bank notes	208	533	(+) 325
National bank notes	918	121	(-) 797
Total	5,806	26,529	(+) 20,723

In January, 1934, the amount of gold coin estimated to be in circulation was arbitrarily reduced to zero, when 287 million dollars would otherwise have been the reported figure. Thus, the actual reduction in gold coin was 287 million dollars less and the increase in total circulation was 287 million dollars more than the figure shown in the table.

Bank deposits. It was pointed out in a previous chapter that, in the United States, the volume of business done with checks is much greater than that done with money. At a recent date, bank deposits in the United States amounted to about 166 billion dollars, of which about 106 billion dollars was in demand deposits. In nor-

mal times it is probable that about 90 per cent of all payments is made with checks. The manner in which bank deposits are expanded and contracted, and the rapidity with which they are drawn against (their velocity), are therefore of great importance. These matters will be understood more readily after a study of the succeeding chapters on banking. In the meantime it is well not to overestimate the importance of money as compared with bank deposits and with business credits generally.

Questions for Study and Review

1. State and explain the "Currency clause" of the Constitution.
2. How did the acts of April 2, 1792, June 28, 1834, and January 18, 1837, affect the amounts of gold and silver in circulation in the United States? Why?
3. When and why were small silver coins in the United States converted from the status of fractional currency to that of subsidiary, or token, currency?
4. Why did the "greenback" fail to circulate at par with gold from 1862 to 1879?
5. When and why did State banks discontinue the issuance of circulating notes?
6. Why did the monetary gold stock of the United States decrease during the period 1890 to 1893?
7. What was the "limping standard", the "parity clause"?
8. Describe the legal and the actual monetary standard of the United States during each of the following periods: 1792-1834, 1834-1862, 1862-1873, 1873-1879, 1879-1933, 1933-1934, since 1934.
9. Outline the silver policy of the United States since May 12, 1933, and state your opinion as to its practical effects.
10. Outline the changes which have occurred in the monetary system of the United States since March 3, 1933.

Problems

1. Summarize the power of the Congress over money and banking. (Refer to the Constitution and to the 1933 Federal Reserve Bulletin, pp. 166-186.)
2. Prepare a table showing the amount of each class of money in circulation in the United States (outside the Treasury and Federal Reserve banks) at the latest date for which figures are available. Compare your table with the data shown for December 31, 1933, in the table near the end of this chapter, and try to account for any important changes noted. (See Federal Reserve Bulletin.)
3. Calculate the bullion value of (a) one silver dollar, and (b) four quarters, based upon the current price of (a) domestic silver at the United States Mint, and (b) foreign silver at New York.
4. Prove that the present monetary value of silver in the United States is, or is not, \$1.2929.

5 Based upon a table of world silver production for the latest years for which data are available, calculate the number of years' past production that would be required (at \$1 2929 per ounce) to equal one-third the monetary value of the present gold stock of the United States (Refer to Federal Reserve Bulletin and annual reports of the Director of the Mint.)

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CHAPTER 4

Evolution of Banking

New banking knowledge. Recent research has not only greatly increased our historical knowledge of banking, but has thrown an entirely new light on the financial affairs of past times. This has caused the formulation of new concepts of the historical and chronological relationships between money and exchange, and banks and bankers. Many points of similarity to present banking methods, and even superiority in some cases, have been discovered. In fact, there is little in modern currency and banking practice which has not been tried at some time in the past. Many civilizations have made their contributions, both good and bad, to the credit mechanism of today. Some of these contributions are briefly sketched in this chapter.

Banking of antiquity. Credit instruments came into being long before money was coined. Clay tablets and fragments show conclusively that promissory notes, bills of exchange, and transfer orders similar to modern checks and bank drafts were in common use in Assyria in the eighth century B.C. These called for the payment of gold or silver, coins not being used until one hundred years later, about 700 B.C., when they first appeared in Lydia.

Banking, in a limited sense, antedated both banks and bankers. As early as 2000 B.C., the Babylonian temples were doing a rushing business in lending gold, silver, and other wealth which had been left in their safekeeping. The rate of interest charged on these loans, 20 per cent compounded monthly calculated on the weight of the metal advanced, is high enough to make even a modern loan shark happy. But, in addition, a charge of as much as one-sixtieth of the deposit was levied by the temple for the *safekeeping* service.

These banking activities of the temples became so general that the following provision regulating deposits was included in the famous code of Hammurabi, promulgated around 2000 B.C.:

If a man gives to another silver, gold or anything else to safeguard, whatsoever he gives he shall show to witnesses, and he shall arrange the contracts before he makes the deposits.¹

Temple banking in Greece. Fifteen hundred years later, Greek temples were likewise used as the depositories of the wealth of the community. The religious principles of the upper classes and the superstitious fears of the general populace gave the temples greater security than could be found elsewhere in a country continually torn by war and civil dissension. While it is not clear whether the priests in Greece loaned money left with them for safekeeping, they did lend the temple funds at interest. As in Babylon, they at first received gifts for their safekeeping services, but with the growth in volume of this function regular charges were levied on the depositors. This business was so large in the more important temples that special space was set aside to serve as a storage vault for the valuables. In the Parthenon itself a special chamber was partitioned off for this purpose. Although these temples served very well to protect the treasures from robbers, and even from raids during civil wars, they were of no avail against later tyrants and invading armies. Xerxes, during the Persian invasions, looted the Great Temple of Delphi, regardless of its claims of immunity, and Dionysius the Elder (430 B.C.-367 B.C.) sacked the temples of Syracuse, taking from them golden mantles, vases, crowns, and even the golden beard of Aesculapius, the father of medicine. In another of his raids Xerxes took treasure valued at nearly one million dollars from the temple of Agyllá in Etruria. Despite these occasional raids, the temples continued to be widely used, even after private bankers appeared to render the services so sorely needed by the merchants and citizens.

First private bankers. The private bankers of Greece brought banking to a high state of development by lending, first their deposits, and later the capital which they had accumulated from profits. They were not mere money changers; to paraphrase a modern advertisement, they "offered banking in all its branches" to the merchants and wealthy men of their day. A high degree of

¹ Hoggson, Noble Foster, *Banking Through the Ages*, Dodd, Mead and Company, New York, 1926.

personal integrity was required to compete successfully with the temples for the available banking business; yet the bankers did exactly this, and at the same time raised themselves from the status of slaves, from which class most of them came, to the rank of freemen, and, in many cases, even to wealth and affluence. In particular, Hermias, slave and confidential secretary, who by his master, Eubulus, a banker, was sent to study under Aristotle so that he might have training in philosophy as well as in banking, eventually succeeded to ownership of the banking house and became ruler of the city of Atarneus. Surely, an outstanding and unusual career! But such successes were the rule rather than the exception, as the following statement by Calhoun indicates:

Perhaps the most striking fact about the great bankers of Hellas is that in almost every instance they were self-made men, who started at the bottom of the ladder—and the bottom of the ladder in those days was much farther down than it is now. Many of the most successful bankers began their careers as slaves.²

In addition, judged by modern standards, they were very progressive on the side of their public relations, as indicated by the following *advertisement*:

To natives and to strangers this bank gives equal dealing; deposit and withdraw, for the calculation comes to account. Let another make excuses: C'aicus pays foreign moneys at request, even by night.

This announcement of C'aicus, banker in a seaport town, probably Alexandria, was in poetic form, and its authorship is ascribed to no less a personage than Theocritus. Even now, 2200 years later, when advertising has not been completely accepted by the more conservative bankers, it is startling to realize that C'aicus not only advertised that he conducted a day and night bank for the convenience of his clientele, but hired a first-class poet to write his copy. Rare taste and literary discernment as well as business ability are evidenced by this—he knew how to reach the ear of his highly cultured public. As far as personal qualities are concerned, the Athenian banker might well be considered the ideal for all later bankers to emulate.

As early as the fourth century B.C. the various local governments began to turn to the private bankers for loans for various enterprises. The banker Hermias, previously referred to, advanced

² Calhoun, George M., *Business Life of Ancient Athens*, University of Chicago Press, Chicago, 1926

large sums to his government, with the result that he eventually became king. In another case, a banker took possession of the citadel of a Greek city as security for a loan, and held it until the loan was paid. Thus, ancient Greece was no stranger to public debt, the greatest burden of present-day mankind.

Banking became so prominent in the business life of Athens that a special body of law developed, covering all financial transactions. This distinct class of actions, known as "banking actions," was handled in a special court in which judgment had to be given within thirty days from the date on which the plaintiff's claim was filed. This ability of the Athenian banker to avoid protracted litigation was a real advantage which the modern banker may well envy, as it sometimes takes years for him to get final decision in a case.

State regulation and supervision of banking were undoubtedly practiced in some degree. The records indicate that the "guarantors" of one bank took charge of its liquidation after its owner had left the country for the sake of his health—a procedure familiar to some modern bankers. The exact function of these guarantors has not been discovered, but evidently some financial and legal responsibility was involved.

From the evidence introduced in several court actions, the book-keeping records kept by the bankers may be reconstructed. These records included not only a journal in which all transactions were entered chronologically, but also a ledger showing the account of each depositor. Running the depositors' ledger must have given the bookkeeper many a headache, as the Greek system of using letters instead of numerals did not lend itself to visual computation, and mechanical calculating frames, similar to those in the Orient today, must have been necessary. It was also the custom to enter in the books the identification which would be required, signatures evidently not being used for this purpose. Demosthenes gives testimony showing the completeness of the records of the bankers, in the following passage:

It is the custom with bankers to make memoranda of the sums which they advance and the purposes for which these are wanted, and of the sums which their customers deposit, so that they may be able, by knowing what has been received and what deposited, to balance their accounts.

The high state of civilization and culture attained by the Greeks warrants the belief that their banking likewise reached a high stage of development. But it is only of late that these assumptions have

been substantiated by a study of the records. In conclusion, it seems that there is little in modern banking that did not also flourish under the Greeks. They even understood from experience the uses of that modern banking device—the moratorium.

Banking in Roman times. The vast area of Roman rule, its intricate system of taxation and government and its far-reaching and complicated commerce, necessitated a banking system which compares favorably with our own in many respects. The *Argentarii* (dealers in silver) were bankers as well as money changers; the latter function was but one of the many services they offered. To them came the Roman business man to deposit, to borrow, to purchase drafts on other points, to sell mortgages, and even to obtain letters of credit. The time deposit, termed a *creditum*, was differentiated from the demand deposit, and interest was allowed on it. Loans of their own capital and, to a much greater extent, of their own deposits were made not only to business men but also to politicians, ambitious wives, courtesans, and even gamblers if the rate of interest was high enough. These loans for purposes of *consumption*, and the high interest rates necessary on such business, combined to bring banking into ill repute. While eventually, under the Empire, interest rates fell to as low as $2\frac{1}{2}$ per cent per annum, banking did not regain its high standing in the community, and practically disappeared during the Dark Ages.

Money lending in the Dark Ages. While banking as such disappeared, the banking tradition was kept alive by the Jews, who became the money lenders of the Dark Ages. As a result of the prejudice of the Christian Church against interest, the field was left free for the Jews. While usury (interest) was expressly forbidden to them in both Exodus and Leviticus, these Biblical injunctions were ameliorated in Deuteronomy, Chapter 23, which provided that “unto a stranger thou mayest lend upon usury.” This permission made it possible for the Jews to specialize in the field of money lending many centuries later, toward the close of the Roman Empire. Under the Empire, interest of 1 per cent per month was legal, with the result that the Jews gained experience and accumulated capital, which aided them in dominating the field for centuries.

Although letters of credit (drafts) were used during the Crusades (1099-1201) and money lending was common, banking in the broader sense did not function during the centuries of the Dark Ages; its revival started in the late Middle Ages with the money

changers and the opening of offices for the transfer of the public debt.

Bank of Venice. Thus, the Bank of Venice, founded A.D. 1171 and known as the first publicly owned bank, was in most respects not a bank at all, as it was designed solely for the transfer of the public debt created by Venice to finance her many wars. It had no capital, and was said to be publicly owned only because its entire liabilities were the forced loan of 5,000,000 ducats (\$8,000,000) recorded on its books as due the wealthy citizens of the town. Its sole asset was the promise of the government to pay interest on the loan at 5 per cent. Naturally, nothing could be withdrawn from the bank; consequently, its only function was the transfer of these credits from one merchant or owner to another. The advantages of the institution were so apparent that a little later the Venetian traders voluntarily deposited their specie in exchange for bank credit, even though the specie could be withdrawn only for export under certain circumstances.

This bank was the first of a long series of *banks* formed for substantially the same purpose, such as the Bank of St. George in Genoa, founded in the fourteenth century, the Bank of Barcelona, established about the same time, and even the Bank of England, although it came considerably later (1694).

Bank of Amsterdam (Bank Van Wissel). The formation of the Dutch East India Company in 1602 signalized the beginning of the great wave of trade exploration and commerce which was to make Holland a world power. Suddenly becoming a center of international trade, Amsterdam was forced to found a municipal bank of exchange (*Wisselbank*) in 1609, to accommodate the needs of the merchants by maintaining a true standard of value in commercial transactions. According to the decree of January 31, 1609, establishing the bank, its purpose was to "check all agio (of the current money) and confusion of coin, and to be of use to all persons who are in need of any kind of coin in business." Such a bank was sorely needed, as the coins in circulation, many of which had been privately minted, were not of uniform goodness. Most of them were worn by long usage, while others had been deliberately mutilated or clipped by previous holders. The almost countless variety of these coins added to the confusion, with the result that they circulated, on the average, at about 9 per cent below their nominal value.

Being essentially a place for the deposit of gold and silver coins

and bullion on the basis of their metal content, the Bank of Amsterdam corresponded much more closely to our assay office than to a modern bank. For these deposits the bank gave standard money which could be withdrawn, or credit (bank money) which could be transferred on the books of the bank by orders in writing. All bills of exchange were required by law to be paid in bank money. While these orders on the Bank of Amsterdam superficially resembled modern checks, it should be noted that the unit was the deposit, and not the individual, as in deposit banking. A substantial charge—ten guilders, or seven dollars—was levied on each deposit made by a new customer, and an additional charge of five dollars was made for each subsequent deposit. These fees, together with certain other miscellaneous charges, constituted the sole income of the bank. For years, the bank made enormous profits for the city, and was such a pillar of strength that it withstood a serious run in 1672, paying specie to all promptly on demand.

The huge store of coins and specie accumulated in the bank proved an irresistible temptation to the Dutch politicians (city fathers) in control of the bank. Thus, in 1760, with 30,000,000 guilders deposited in the bank, and supposedly held intact, an investigating committee could find only 10,000,000 guilders in the vaults. Since these were special deposits, for which a safekeeping charge was paid by the depositor, this was not only an abuse of confidence; it was plain stealing of 66 2/3 per cent of the bank's reserves. But this was not the first time that a government had stolen bank reserves belonging to its citizens, nor, unfortunately, was it the last time.

Despite the disclosures of 1760, and despite rules prohibiting lending except on the security of specie deposits, when the French captured Amsterdam in 1795 and seized the bank's books, they discovered that the specie was far below the deposit liabilities, because of advances of more than 9,000,000 guilders in coin which had been made to the Dutch East India Company, Holland and the city of Amsterdam, itself. The city, as owner of the bank and guarantor of its deposits, assumed the liabilities and managed to pay all depositors in full before 1802, but public confidence having been lost, it was necessary to liquidate the bank in 1819. Thus, the Dutch learned long ago that banking reserves create public confidence and that government guaranties may not restore this confidence once the reserves are dissipated.

The Bank of Amsterdam is also of interest because, during the

200 years of its existence, it played an important part in aiding Amsterdam to establish its financial supremacy. Exchange banks, of which the Amsterdam Bank was the best known, were a prerequisite to the broad-scale international commerce carried on by the Dutch.

John Law—gambler and banker. Other countries were experimenting with banks during the lifetime of the Bank of Amsterdam. Some of them, notably France, which had already had more than its share of misery due to financial mismanagement and lack of credit, went much further along the banking road than did Holland. A Scotsman, John Law, taught the French a great deal about banks—most of it to their sorrow.

Law, widely-traveled gentleman, adventurer, gambler, and speculator, had observed the crying need for sound credit and currency in the various countries he had visited. Gifted with financial ability of a high order, he applied himself to the problem. When he returned to Scotland about 1700, he published a study, "Money and Trade Considered," in which he proposed the following plan of currency issue:

It is proposed that Parliament shall appoint forty commissioners, who shall be accountable for their management of affairs; and that these commissioners shall be empowered to issue notes to be a legal tender for all purposes. The Parliament shall choose one of these three methods of issue: The first method is to authorize the Commission to loan its bills, at ordinary interest, on mortgage security, the loan in no case to exceed half the value of the realty mortgaged; the second mode is to give out in notes the full value of the land, estimated upon the basis of twenty years' revenue, or more or less according to the valuation that may be placed upon it, the Commission, or its authorized agents, being empowered to enter into possession of the land by wadsett redeemable within a certain period; the third plan is to issue notes to the full value of the land upon sale of it irredeemably to the Commission or its representatives. These notes will always be as valuable as specie, because they will represent a mortgage value exactly equivalent to the coin it could be exchanged for. If there should be any losses, a fourth of the Commission's income would suffice, in all probability, to cover them. This paper money will not depreciate as coin has depreciated in the past, and may again in the future, and we shall always have as much specie as we can use, but never any more.

The ideas contained in Law's summary of his proposal, quoted above, were the basis of many currency experiments thereafter. But the Scots would have none of the scheme, for they saw the great danger involved in having a currency without any provision for ultimate redemption. After the Scottish Parliament repudiated the entire project, Law took his scheme to France, where the need for a sound currency was much greater than in Scotland.

John Law and the French. Law found France full of schemers and schemes to relieve the destitution of the people by financial or currency methods. His fertile brain was equal to the occasion. In an audience with the Regent, he outlined a plan which, although it had little in common with the Scottish proposal, was bold and audacious enough to capture the Gallic imagination. The Regent approved his plan to establish a State bank of issue, all the profits of which would accrue to the State; but the council of finance refused its approval. Law countered with a proposal to establish a privately owned and managed bank of issue subject to the general control of the government. With the aid of the Regent, letters of patent were issued for this "General Bank" on May 2, 1716, in spite of strenuous opposition in Parliament.

Among other privileges, the General Bank was permitted to keep its records and to issue bills for specie in terms of "écus de banque." These bills corresponded to the "bank money" of the Bank of Amsterdam. Since they were based on the actual value of the specie or coins on the day of deposit, they were standard in value and were 100 per cent secured by gold and silver. The bank was permitted to open accounts current, payable in its notes (écus de banque), discount commercial paper and trade in foreign exchange. Prior to this time, the prevailing discount rate had been more than 30 per cent per annum, because of the activities of usurers and the lack of credit facilities. The bank immediately reduced the discount rate to 6 per cent, and later to 4 per cent. The bank was prosperous at the beginning, and accomplished more than Law had promised. If Law had been content with his success as a banker and discounteer, the financial history of France would have been far different, but his ambition and imagination drove him on to new schemes.

John Law's "System." With the aid of the Regent, who was now willing to back him to the limit, Law proceeded to develop one of the most ambitious financial schemes ever conceived by the mind of man. As the first step in this scheme—or "System," as it was called—the General Bank was converted on December 4, 1718, by a decree of the infant King (through the influence of the Regent), into the Royal Bank. Among other changes, its notes were no longer redeemable in specie. They relied for their security on the general credit of the bank and the guaranty of the government. This fatal weakness undermined the notes, the bank, and the government finances. It was the beginning of the downward path, but

the public did not fully realize the inevitable consequences, and for a short time the bank flourished more than ever before.

The "Compagnie d'Occident" was organized by Law, ostensibly to colonize the Mississippi Valley, but actually to take over the State debt, as only State bills were accepted in payment for the shares. The successful flotation of this company fired Law to even greater endeavors. The "Compagnie des Indes," capitalized at 25,000,000 livres, was organized on June 17, 1719, and its shares sold for cash. It immediately took over the "Compagnie d'Occident," the Guinea Company controlling the African trade, and the China Company, which had a monopoly of the trade with the Orient. Thus the India Company had a monopoly of the entire foreign trade of France. On July 15, 1719, the Company paid the government 50,000,000 livres for a nine-year monopoly of the issue of coins and management of the mint. On August 27, 1719, the Company loaned the King, in return for the tax monopoly, 1,200,000,000 livres to retire the State debt. It also took over the tobacco monopoly.

These acquisitions were financed by the issuance of stock the par value of which totalled 312,000,000 livres. This figure was imposing enough, but now comes one of the most amazing parts of the entire stock inflation: these shares were sold for 1,797,500,000 livres, all of which was paid in bills issued by the Royal Bank. Of this total, 1,620,000,000 livres was paid for the last issues of the Company of 162,000,000 par value: that is, ten times par. Speculation ran riot, pushing the market price of the shares to 3600 per cent of par.

Law would accept only notes of the Royal Bank in payment of the subscriptions, with the result that these notes went to a premium of 10 per cent. People demanded the notes of the bank to subscribe to the stock of Law's companies, and were unwilling to accept gold and silver. Law had accomplished the impossible: irredeemable paper was preferred to gold and silver. This was the last degree of financial insanity. The reckoning, long delayed by Law's audacity, was at hand.

Failure of the "System." The various monopolies held by the India Company might have yielded a handsome return on the par value of the stock. The profits were totally inadequate, however, to maintain the inflated market price of 36 times par. Certain individuals called "realizers," in contempt, began to present notes to the bank and demand payment. For a while they were promptly

paid. Then the bank began to use various banking artifices to gain time. The Regent supported Law, and edicts were issued to aid the bank. They all failed; they only drove specie out of circulation.

The bills of the bank dropped to 50 per cent of their face value, and still the "realizers" demanded payment. The Regent attempted to stay the precipitous drop in the value of the shares of the India Company by setting a definite scale for a reduction in their market price. This plan failing, trading in the shares was prohibited; still the price fell. The Mississippi Bubble had collapsed.

These various edicts and decrees caused great alarm. As the flight from the bank notes gained momentum, prices of commodities rose so rapidly that it was necessary for Law to resign as Superintendent of Finance on December 27, 1720, and flee for his life to Brussels. A little later the "System" was liquidated with enormous losses; the Royal Bank disappeared in disgrace.

The "System" had ruined Law and wrecked France financially—all in four and a half years. Such is the force of credit improperly used. It took the French 47 years to forget the nightmare of this credit orgy, for no other bank was established until 1767.

John Law's contribution to banking. John Law demonstrated on a grand scale certain banking fallacies. He proved, beyond a doubt, under the conditions that prevailed in his time, the unsoundness of many banking and currency schemes which men and nations have continued to try to this day.

The history of the "System" showed that government fiat, financial legerdemain, and glowing promises are not satisfactory substitutes for honest banking. Law was unable to maintain public confidence with hocus-pocus. Speculation, secrecy of operations of his bank, and improper government relations all combined to destroy the public confidence necessary to the continued success of any credit institution. John Law learned all these things—but too late, as have many a banker and government since.

When he was old, he returned to his homeland and, it is said, was pensioned by the English for what he had done to their traditional enemies, the French.

Other banks in the seventeenth and eighteenth centuries. The English also tried their hand at a bank founded on the public debt, following the plan of another Scotsman, William Patterson. A charter was granted in 1694 to "The Governor and Company of the

Bank of England," in return for a perpetual loan of £1,200,000 to the government. As this represented all of the capital which had been raised, the Bank of England (as did many another early bank) began banking operations without a pound of cash capital. This was no handicap, however, as it was given the right to issue demand notes. The need for a credit institution was so great that it was popular from the start. The English being naturally conservative, the Bank of England was steered clear of the pitfalls which had wrecked the French bank, and has survived as a pillar of strength to this day. Privately owned and privately operated for more than three centuries, it proved the most public of all banks.

Although banking was developing apace in Europe throughout the 17th and 18th centuries, it is unnecessary for the student of American banking to study it closely, as banking was developing independently in the colonies along distinctly American lines during the same period.

American banking. The free, pioneer spirit of our forefathers, and the entire absence of restrictive or prohibitory legislation, combined to produce in America a species of banking the like of which the world has never seen. Experiment, innovation, and downright fraud in currency and banking were tried on a grand scale. The student of banking need look no further for "horrible" examples and modern instances—everything was tried; nothing was overlooked. Schemes—good, bad, and indifferent—were launched with little regard to circumstances or results. Only a young country with practically inexhaustible natural resources could have so well survived the terrific economic drain of such inadequate, ill-advised, and misguided banking.

Nearly all of the various states engaged in banking at one time or another, generally with disastrous results. The pendulum then swung in the opposite direction, and an era of free, yes, wildcat banking was ushered in. Is it any wonder that until quite recently books were written to prove that banks were institutions of the devil; or that one finds an early pioneer who had migrated from Massachusetts to Ohio writing back to friends that while he is in danger from wild animals and Indians, he "blesses God he is out of reach of a bank"?

Colonial banking. In the early American colonies, the word "bank" meant a pile or heap. "Raising a bank" was the terminology used in colonial days in Massachusetts to cover the issuance of colonial bills of credit rather than the institution which created

the paper money. These early colonists needed capital—they thought their need was money. This led to many different plans for creating money by legislative decree or community cooperation. Land being plentiful, it was natural for the colonists to turn to it when security was needed to make their paper money circulate. For example, a Land Bank was formed in Massachusetts as early as 1714. Owing to overissue, these early issues of "money" soon dropped so much in value that the community reverted to barter. There was practically no banking in the modern sense before the Revolution.

First Bank of the United States. One of the pet ideas of Alexander Hamilton, as Secretary of the Treasury, was the formation of a national bank. Having drafted the charter for the Bank of New York, he drew on his experience and proposed a charter for a national bank, which was adopted by Congress, with certain changes, in 1791. The bank's charter, which ran for twenty years, was not renewed, because the bank had aroused the antagonism of several states through establishing branches. Likewise it stood accused of exercising political influence. This last was a very serious charge, politically, since 18,000 of its 25,000 shares were owned in England. The fact that only the 7,000 American shares possessed the right to vote did not deter the politicians. Desha, of Kentucky, speaking in the House of Representatives, called the bank "a viper in the bosom of our people," and felt certain that George III was a heavy stockholder.

The bank furnished a fairly satisfactory circulating medium during its existence, but aroused the hostility of nearly all classes by standing firmly against inflation, a very unpopular course at any time but particularly so in those days. Punctuality in meeting engagements, practically unknown before, was greatly improved by this bank. It also aided the Federal government a great deal in its financing and fiscal functions.

Second Bank of the United States. From the liquidation of the first Bank of the United States in 1811 to the chartering of the second Bank of the United States on January 8, 1816, banking progress was negligible. The state banks, which were called on to bear the burden of providing circulating notes and other facilities, multiplied in number, but because of currency inflation were forced to suspend specie payment in 1814 as an aftermath of the War of 1812. This almost paralyzed the Treasury, as it became impossible to transfer funds from one section of the country to another,

because notes of banks in one section did not pass current in another. Gallatin insisted that all this would have been avoided had the Bank of the United States been in operation.

Various proposals were made for the establishment of a central bank, such as the one proposed by Dallas, which was designed solely to lend the government \$30,000,000, and, *incidentally*, furnish a circulating medium. Daniel Webster opposed this measure, feeling that the bank should primarily finance commercial activities rather than government requirements. President Madison himself proposed a bank which eventually was chartered as the Bank of the United States (second). The charter was long and elaborate; it covered every contingency except the small detail of getting enough specie in the bank with which to carry out its manifold functions. While \$35,000,000 capital was planned for the bank, 1/5 of its stock was taken by the government (on credit, of course), and the remaining \$28,000,000 was sold to the public on the installment plan. One-quarter of the public subscription was to be paid in specie, but the remaining 3/4 of the public offering, and the government subscription of \$7,000,000, were payable in debt, mostly government bonds which were exchanged for shares of the bank.

Things would have been bad enough even if all the specie required by the charter had been paid in, but this was not the case. As a matter of fact, the bank probably never got more than \$2,000,000 of specie in payment for its stock, whereas it was supposed to get \$7,000,000. On top of this, the bank began immediately to speculate in specie and anything else handy, with the result that it was in difficulties within two years. Cheves, who became its president on March 6, 1819, three years after its charter was granted, was forced to borrow \$2,500,000 in Europe to avoid closing its doors. Cheves stopped all loans on the bank's own stock, and demanded repayment of such previous loans at 5 per cent sixty days. By drastic methods he restored the bank to solvency and public confidence, which it enjoyed for ten years.

Its contribution to banking was substantially the same as that of the first Bank of the United States. It facilitated the transfer of funds from one part of the country to the other; it maintained a uniform circulation equal to coin; it reduced the rates of exchange and benefited commerce.

Nicholas Biddle, who became third president of the bank in 1823, was, however, not content merely with contributions in the economic field. Instead of standing on the record, he decided to carry

the fight to the state banks, with ultimately disastrous results. Despite the fact that the state banks had not resumed specie payments and that their notes did not circulate at par, for political reasons President Jackson espoused their cause in his annual message in 1829. In the "Bank War" which followed, Biddle, who had permitted the bank to become embroiled, was seriously embarrassed by the removal of government deposits from the bank. This transfer, opposed by the Congress, was made, upon the direct order of the President, to state banks selected by his agents, which were thereafter called Jackson's "pets."

Biddle claimed that the issue was between his bank, with a regulated currency, and the state banks, with an uncontrolled, unregulated, naturally inflationary paper currency; that is, stability vs. inflation. While this was true, Jackson and his party were able to prove that the Bank of the United States had not been averse to speculation itself, and that its charter had not been observed in most respects. Also, Jackson insisted that his overwhelming majority in his campaign against Clay, in which the Bank was the major issue, was a mandate which he should enforce in favor of the state banks. This he proceeded to do with a vengeance, vetoing the act renewing the charter and leaving nothing for Biddle to do but get a state charter.

Thus, the second Bank of the United States became a state bank in Pennsylvania in 1836. To put its large capital to work, it engaged in unwholesome speculation and in nonliquid transactions. It failed in 1841 because of illegal and improper loans, including many to its officers and directors, that completely wiped out the bank's capital. Biddle himself died in 1844, poor and broken-hearted.

Multiplication of state-chartered banks. Coincident with Jackson's attack on the Bank of the United States, there began a tremendous expansion in the number of state banks. Three hundred forty such banks, with capital stock of 99 millions and little or no money, were founded in the period between 1832 and 1837. It was esteemed such a privilege to subscribe to their stock that riots were a common occurrence, and "men of pugilistic ability" were used by many to guarantee the entering of their subscriptions. The new prospect of getting a government deposit made these banks all the more attractive. Banks were the "patent medicine" of the day in business; they were a remedy for everything. A famous New York institution, the Society of Tammany, finding

itself in debt, planned to get rid of the debt by starting a bank. Likewise, a bank was proposed as the best method of relieving the sufferers from the great New York City fire of 1835.

Wildcat banking. In 1827, a pamphlet entitled "A Peep Into The Banks," by an anonymous author, made the following observation on banking in New York State: "The time was when to get a bank it was thought necessary to have money to put in; now men get a bank charter for the contrary reason—because they have no money and want some."

As early as 1795, Wolcott, Secretary of the Treasury, wrote Hamilton: "Banks are multiplying like mushrooms." This tendency has been so prevalent throughout our history that it might be called the "natural order" in American banking. When to this is added the encouragement given by politicians, such as Jackson and others even more self-seeking, and also the impetus given the formation of all new ventures by our system of ever-recurring periodical booms, it is not surprising that banking facilities were always expanded far beyond the needs of the times. This expansion was so utterly reckless and wild during the period 1830-1840 that it was popularly dubbed the era of wildcat banking, as banks were started even in the depths of the forests, where there were more wildcats than humans.

The table shown below, giving the banking statistics from 1830 to 1862, inclusive, summarizes the expansion during the period and the further growth of banking up to the beginning of the Civil War.

During the period covered by the table, hundreds of banks failed, and these are not included in the totals except in so far as others took their places. Then, too, many banks were formed on paper only, solely for the purpose of note issue, and undoubtedly did not find their way into these figures. Hoggson^{*} estimates that in the fifties there were in circulation 7,000 different kinds of bank notes, including 1,700 issues of banks which existed solely on paper, and 3,800 different counterfeit issues. To add to the general confusion, notes issued by schools, bridge and turnpike companies, libraries, fraternal organizations, orphan academies, railroads, and other non-banking agencies were in circulation at various times in different states. There were no standards; every bank found it necessary to use several bank note "reporters" and counterfeit detectors to determine the value of the notes offered at its windows.

^{*} Hoggson, Noble Foster, *Epochs in American Banking*, John Day Company, New York, 1929.

EVOLUTION OF BANKING

BANKING STATISTICS OF THE UNITED STATES, 1830 TO 1862

(For 1830-1833, from 14 *Banker's Magazine*, 765; 1834-1862,
Cong., 3 Sess 5 Ex 210)

<i>January</i>	<i>Number of Banks</i>	<i>Capital</i>	<i>Circu- lation</i>	<i>Deposits</i>	<i>Cumul & Deposits per Capita</i>	<i>Specie</i>	<i>Loans</i>
1830	394	\$182 m.	\$ 51 m.	\$ 58 m	.	\$ 24 m.	\$272 m.
1831	426	186	57	62	. . .	25	285
1832. . . .	448	191	62	67	. . .	25	301
1833. . . .	472	198	68	71	. . . .	26	316
1834	506	200	91	75	. . .	26	324
1835. . . .	704	231	103	83	\$12.61	43	365
1836. . . .	713	251	140	115	16.77	40	457
1837	758	290	149	127	17.66	37	525
1838	829	317	116	84	12.46	35	485
1839	840	327	135	90	13.59	45	492
1840	907	358	107	75	10.70	33	462
1841. . . .	784	313	107	64	9.79	34	380
1842. . . .	692	260	83	62	8.07	28	323
1843. . . .	691	228	58	56	6.15	33	251
1844	696	210	75	81	8.31	49	261
1845. . . .	707	206	89	88	8.96	44	288
1846. . . .	707	196	105	96	9.90	42	312
1847. . . .	715	203	105	91	9.35	35	310
1848	751	204	128	103	10.65	46	344
1849. . . .	782	207	114	91	9.17	43	332
1850. . . .	824	217	131	109	10.39	45	361
1851. . . .	879	227	155	128	11.87	48	413
1852. . . .	992*	237*	156*	189*	13.31	53	527*
1853. . . .	1,008*	225	116	145	13.00	47	498
1854. . . .	1,208	301	204	188	14.97	59	557
1855	1,307	332	187	190	13.95	53	576
1856. . . .	1,398	247	195	212	14.66	59	634
1857. . . .	1,416	370	214	230	15.52	58	641
1858. . . .	1,422	394	185	185	11.56	71	583
1859. . . .	1,570	401	193	259	14.91	104	657
1860. . . .	1,562	421	207	253	14.66	83	691
1861. . . .	1,601	429	202	257	14.13	87	696
1862. . . .	1,496	419	183	297	14.36	102	617

* Supplied from the *Banker's Magazine*, as above.

The following record of the trying experiences of an 1840 traveler with the various kinds of notes encountered on a trip shows the intolerable currency confusion of the period:

Started from Virginia with Virginia money; reached the Ohio River; exchanged \$20 Virginia note for shimplasters and a \$3 note of the Bank of West Union; paid away the \$3 note for a breakfast; reached Tennessee; received a \$100 Tennessee note; went back to Kentucky; forced there to exchange the Tennessee note for \$55 Kentucky money; started home with the Kentucky money. In Virginia and Maryland compelled, in order to get along, to deposit five times the

amount due, and several times detained to be shaved * at an enormous per cent. At Maysville wanted Virginia money, couldn't get it. At Wheeling exchanged \$5 note, Kentucky money, for notes of the Northwestern Bank of Virginia; reached Fredericktown; there neither Virginia nor Kentucky money current; paid a \$5 Wheeling note for breakfast and dinner; received in change two \$1 notes of some Pennsylvania bank, \$1 Baltimore and Ohio Railroad, and balance in Good Intent shimplasters⁷, 100 yards from the tavern door all notes refused except the Baltimore and Ohio Railroad; reached Harpers Ferry; notes of Northwestern Bank in worse repute there than in Maryland; deposited \$10 in hands of agent; in this way reached Winchester; detained there two days in getting shaved. Kentucky money at 12 per cent, and Northwestern Bank at 10.

Two banks of the period. A bank set up by the Mormons at Kirtland, Ohio, in 1836, in many respects typifies the entire period. It had no coin, and gave no security for its note issue—no one was responsible. A Pittsburgh banker who returned some of its notes for redemption was informed by Rigdon, its president, that he had issued those notes to circulate for the convenience of the people; to redeem them would defeat the purpose. And he, therefore, refused. The bank closed after one year of operation, leaving \$40,000 of notes outstanding—which aided the Mormons in reaching a decision to leave the state.

Another case in point is that of the North American Trust and Banking Company of New York City. Organized in 1838 with an announced capital of \$50,000,000, it actually raised only \$2,000,000, with which it started business. To make matters worse, the \$2,000,000 consisted almost entirely of bonds and mortgages. The bank was put in the hands of a receiver three years later.

Sound banking developments prior to the Civil War. While the banking experience of the period before the Civil War included many reverses, because of the lessons that it taught it was all the more valuable. In banking, especially, it is just as important to know what not to do as it is to know what to do. Students of banking should not dismiss this period with the idea that it was either a farce or a tragedy. Great ferments were at work, out of which have come many of the great banks of our day. Furthermore, the speculative and expansionist banking of the period did help to finance the rapid development of the country.

Various experiments were carried out, such as the Suffolk System, Safety Fund System, state-owned banks, and Federal government interference. Probably the bitterest comment that could

* Loss in changing money.

⁷ Fractional currency.

be made is that later bankers learned no more than they did from these attempts at trial and error.

Questions for Study and Review

1. List in order of historical appearance: money, credit, banks, banking, coinage, and safekeeping.
2. Describe the banking activities of the temples of Babylon
3. What charges were levied by the temple bankers of Greece?
4. Why was the safekeeping function of such great importance in Babylonia?
5. What contributions to modern banking were made by Greece? By Rome?
6. What part did the Jews play in the development of early banking?
7. Why did the American colonists confuse money and capital?
8. Describe the outstanding characteristics of the era of wildcat banking.
9. What part did John Law play in the development of banking?
10. Explain the refusal of the government to re-charter the first Bank of the United States. The second Bank of the United States.
11. Why was it that men without capital could found banks in America throughout the entire period before the Civil War?

Problems

1. Calculate the ratio of bank circulation to deposits in the United States for the years 1830, 1860, 1900, 1940, and the latest date for which information is available.
2. Calculate the population served by the average bank in the United States for the same years as in Problem 1.
3. Calculate the amount of bank circulation and deposits per capita in the United States for the same years as in Problem 1.
4. What per cent of the capital of the second Bank of the United States was actually paid in in specie at the date of opening?

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CHAPTER 5

American Banking Institutions

The nineteenth century. Banking progress in America might well be characterized by the following observation of Bacon on human progress: "The rising unto place is laborious, and by pains men come to greater pains; and it is sometimes base; and by indignities men come to dignities. The standing is slippery; and the regress is either a downfall, or at least an eclipse, which is a melancholy thing."

As indicated in the preceding chapters, throughout the nineteenth century, banking and currency were the objects of a series of experiments, the results of which at times bordered on chaos. Likewise, the relations between the Federal government, the states, and the banks were in a continuous flux. During the second quarter of the century, nearly all the states, except those in the East, established or participated in the establishment of banks of the state. At one time or another, Alabama, Arkansas, Florida, Georgia, Illinois, Indiana, Kentucky, Mississippi, Missouri, Ohio, South Carolina, and Tennessee, to name a few, had such banks. These state excursions into the field of banking were generally unsuccessful, and in most cases were downright frauds on the public.

Banks of the state. These examples of political banking should be worthwhile object lessons to present-generation Americans. Taxpayers wanted the state bank to earn enough profits to relieve them from taxation; debtors continually demanded "relief" (from their debts to the bank), a demand which vote-seeking politicians found it difficult to resist. The president of the Bank of Tennessee summed up the problem by pointing out to the legislature of 1845 that they "could not expect to live on the bank and plunder it

too." The basic fallacy underlying the formation and operation of these institutions is summarized in the following words of Sumner: "All the bank of the state schemes rested upon a notion of the 'credit' of the state as a metaphysical entity, which could be called upon to do the work of capital, although capital cannot be produced without labor and frugality." The record of these banks stands as one of the darkest blots on the escutcheon of statehood. Private banking at its worst has never, even at this late day, approached the depths of banking abuses, infamy, and fraud plumbed by some of these banks of the state.

Two banks of the state, established in Indiana and Ohio, respectively, must be excepted from this general condemnation. While other states were "wildcatting" as flagrantly as the worst bank wreckers of the time, Indiana and Ohio dared to run honest banks. Such heresy warrants further examination.

State Bank of Indiana. The State Bank of Indiana was established by the legislature in 1834, the state contributing one-half of the capital of \$1,600,000, and private individuals supplying the remainder. The bank's first act departed widely from precedent; the capital was paid in entirely in *specie*. Another departure was the fact that the state never controlled the bank—the legislature selected the president and four directors, while the private stockholders elected ten directors.

Structurally, this bank resembled somewhat the Federal Reserve System or a Canadian chartered bank. The board of directors constituted the parent institution, and had no capital or credit under its immediate control. The sole function of this head office was to supervise, examine, and, in general, control the ten banks, called branches, which carried on the actual banking operations. Each branch had a capital of \$160,000, locally owned and controlled but subject to the central board at Indianapolis. While the branches were independent as to assets and profits, they were jointly liable for all the debts of all the branches. No branch was permitted to issue notes in excess of twice its capital. Each branch was required to receive the notes of all other branches at par, and to redeem its own notes on demand in *specie*. The stock carried double liability. The observance of these and other sound banking principles, together with able management, made the bank a success from the start. This bank was the first American institution to follow the modern principle of thoroughgoing external examination and supervision. The excellence of the examinations and

audits by the central board was undoubtedly a great factor in its success

The state of Indiana received a net profit of \$3,500,000 from the bank during the period of its operation from 1835 to 1859. Attempts to renew its charter threw the whole matter into politics. As this was not to the taste of the central board, the bank was liquidated. It was succeeded by a private institution, which survived as a successful bank until 1866, when the Federal tax of 10 per cent on its notes forced it out of business.

The State Bank of Ohio (1845-1866) was likewise essentially a central board of control at the head of a group of "branches." There were ultimately thirty-six banks in the system. The State Bank of Ohio was always solvent and highly successful until the advent of the national banking system ended its existence.

Why were these two banks always sound and profitable in a period when all other banks of the state were in continual difficulty? The answer is simple: they had first-class management and followed sound banking principles

Another state bank, that of Illinois, had nothing in common with these except similarity of name. It was at the opposite end of the scale, and will accordingly be reviewed.

Bank of the State of Illinois. In the 1830's the State of Illinois participated to the extent of \$3,200,000 (an enormous amount for those days) of stock in the ownership of the Bank of the State of Illinois and the Bank of Illinois, and thus secured control of both banks. The subsequent history of these two banks is so much of a pattern that only the Bank of the State will be discussed. This institution was an almost perfect example of what a bank *should not* be.

Superficially, the Bank of the State of Illinois resembled the Bank of the State of Indiana; actually, it was a state credit machine and a banking fraud from the start. Chartered in 1835, with a capital of \$1,500,000, the state taking \$100,000 of the stock, the bank was practically insolvent in the short space of two years. The state then took another \$2,000,000 of stock through the simple expedient of turning over to the bank \$2,000,000 in state bonds. With this fresh "capital," the bank was able to continue its reckless note issue and banking methods until the legislature officially recognized its insolvency in 1843 and repealed its charter, forcing liquidation.

During its entire existence, the bank had little "real" money

(specie); the chief backing for its notes was the state bonds, which, having no other sizable market, were rarely above 50 per cent of par. The bank, however, always issued notes for the entire face value of the bonds. The quality of its loans may be judged by the later discovery of the legislative Committee on Banks that the holders of \$60,000 of its stock in 1838 had borrowed more than \$900,000. The state also borrowed heavily and continually from the bank. The sorry history of the Bank of the State of Illinois, which was typical of nearly all the other state banks, may be epitomized thus: the state (politicians) and certain favored individuals swindled the bank; the bank in turn swindled everybody; the politicians made the bank the scapegoat and ended it.

George Smith. Needless to say, these amazing excursions of the states into the realm of banking were not the only developments of the "wildcat" days. Here and there, private initiative was following sound banking principles in the development of other institutions, and blazing trails to be followed by later generations. Of these individuals, George Smith made a particular contribution to banking progress in the West. Smith, a Scotsman with a natural sense of the time-value of money, introduced New York exchange to the Middle West.

Unable to secure a charter for a bank because of the intense prejudice against such institutions, he induced the Wisconsin legislature to pass a special law incorporating an insurance company. The charter expressly excluded "banking privileges" (note issue, in those days) but permitted him to accept money on deposit and to loan it on security. He proceeded to issue certificates of deposit which circulated exactly as notes. These certificates—known as "George Smith's money"—at first redeemed in specie in Milwaukee, were later redeemed by drafts on New York. To reimburse his New York account, Smith bought drafts covering wheat and other agricultural commodities shipped to the East. He held his notes at par, and during several runs paid specie on demand. For fourteen years he maintained the integrity of his notes, until Wisconsin passed a law in 1853 requiring the deposit of security with the state Comptroller to cover circulation. Smith thereupon withdrew and established a bank in Chicago, which successfully used the same principles.

Smith was not only the first important dealer in drafts on New York (New York exchange), but he also credited to deposit accounts the proceeds of discounted drafts, just as is done today.

This was a radical change; other banks insisted on the proceeds of loans being withdrawn in notes in order to increase their circulation. Smith made a substantial fortune with the help of his principle that *banking profits result from the act of discounting and that it was immaterial whether the notes were actually withdrawn or the advance remained as a deposit balance*. This was a successful application of the "banking principle" of credit and note issue, a principle which is explained later in this chapter.

New England experiment: note redemption. In its search for profits, the Suffolk Bank, in Boston, started a system of note redemption in 1818 which was a distinct contribution to banking theory and practice. At first single-handed, and later, in 1824, with the aid of the other Boston banks, it established what was in effect a clearing house for the notes of New England banks, with the result that the notes of all participating banks circulated at par.

The significance of this advance in banking methods may best be appreciated after a hasty survey of the currency conditions existing before and after the plan was put into practice. Previously, country-bank notes had circulated in Boston at discounts varying from 1 to 5 per cent, depending upon the distance from Boston and the difficulty of redemption, with the result that the notes of Boston banks, which were at par, returned immediately for redemption under the operation of Gresham's law, while the country notes continued to circulate indefinitely. In fact, the seven Boston banks had less than one twenty-fifth of the total circulation outstanding, although they had more than half of the banking resources of New England.

Naturally, the country banks were bitterly opposed to the Suffolk plan, as bankers thought in those days that bank profits were made almost entirely by note circulation. After quite a battle, the country banks agreed to keep with the Suffolk Bank a balance of \$2,000 each, to cover overhead, and an additional balance sufficient to redeem all the notes presented to it. In return, the Suffolk Bank agreed to accept at par the notes of *any* sound New England bank. This permitted country member banks to restore their balances in Boston by shipping, instead of specie, the notes received over their own counters. This quick and easy redemption caused the notes of the members to circulate freely, not only in New England but also in the remainder of the United States and even in Canada.

The Suffolk System did much to raise banking standards. In New England, at least, it firmly established the principle that a

bank should pay out over its own counters only specie or the equivalent notes circulating at par. This had a salutary effect on the amount of notes issued by the banks. Under the Suffolk System, the "currency principle" of note issue was superseded by the "banking principle," as New England transactions eventually resulted in debits or credits on the books of the banks. Thus, the amount of notes issued was regulated to a great extent by the needs of industry and trade.

The Suffolk System did for notes in New England what the Federal Reserve System, through par collection, has done for checks in our day. In fact, the entire present scheme of par collection closely follows the precedent set one hundred years earlier in forcing par redemption of notes. The service rendered by the Suffolk System is indicated by the five hundred banks which belonged to the System at one time, and by the fact that it flourished in varying degrees until superseded by the national banking system, with its requirement that national banks accept the notes of all other such banks at par.

New York experiments: Safety Fund and Free Banking. In New York, as in New England, the early banks issued notes freely, with no specific security back of them. The need for regulation of their note issue was increased many-fold by the legislature's granting of bank charters to irresponsible groups, in return for political considerations—and worse. Although a special act of the legislature was necessary for each bank charter, the Bank of America, for instance, secured a first-class charter in 1811 by what was reported to be wholesale bribery. Before that, the Bank of the Manhattan Company, disguised as a water company, had through the aid of Aaron Burr secured the famous and very valuable Manhattan Company charter, which is in use to this day. The constitutional amendment of 1821, which provided that a two-thirds vote of both houses of the legislature be required to pass a bank charter, only made it necessary to buy more legislators. Bank charters were political spoils during the first four decades of the nineteenth century.

In an effort to regulate the note issue of these politically created institutions, New York made two distinct contributions of great importance to banking theory and practice, the Safety Fund, or system of mutual insurance; and the Free Banking, or bond deposit system of note security.

Safety Fund: deposit and note guaranty. The Safety Fund was created by the Act of 1829, which provided that every bank securing a new charter, or the extension of an old one, should pay into a special bank fund in the hands of the Comptroller of the state an amount equal to 3 per cent of its capital, in annual installments of one-half of 1 per cent. This fund was to be used to pay the debts (notes, deposits, and creditors) of failed members of the system after their own assets had been exhausted. After a short time, by legislative enactment, two-thirds of the fund was made immediately available to note holders; in 1842 the Safety Fund law was further amended to give note holders a prior lien on it. This last law came too late to save the fund from embarrassment. The charges against it at the time were so great that it was necessary for the state to advance a large sum to the fund. Eventually the fund repaid the state with interest and, in addition, redeemed nearly \$700,000 of notes fraudulently overissued. Had this system of mutual guaranty been confined to notes, it would not have broken down, as students of banking are now agreed that the annual assessment of one-half of 1 per cent would have been more than adequate for the guaranty of notes. Then, too, the Act should have provided some method of registering the amount of notes issued, which would have avoided the later scandals of overissue.

While the Safety Fund System made its contribution in the United States and passed on, it was adopted in principle by Canada in 1890, and survives there as the circulation redemption fund. Canadian banks are required by law to deposit, with the Minister of Finance, Dominion notes or gold equal to 5 per cent of their average note circulation.

The legislation of 1838, which permitted the free incorporation of banks upon the deposit of certain securities, dealt a body blow to the Safety Fund System, which was based on the limitation of the number of banks operating in the states. The prohibition of further special bank charters contained in the Constitution of 1846 finally doomed the system, as all of its members had special charters.

Free Banking: bond-secured notes. The bribery and political trickery referred to above caused a strong demand on the part of the people of New York for "free banking." As a result of a campaign, the Free Banking Act was passed by the legislature in 1838. This Act permitted any group of individuals to open a bank, but they

could get notes from the Comptroller only by depositing with him bonds of the United States, New York State, and other approved states, or, subject to certain restrictions, real estate mortgages. During the first five years of free banking, the percentage of failures was heavy, and the notes of failed banks were redeemed on the average at only 76 cents on the dollar. Even the notes in ordinary circulation were redeemed by banks at a discount; consequently, banks were organized by unscrupulous people for the sole purpose of redeeming their own notes at a profit. The Act was amended to eliminate these evils, with such success that thereafter failures were rare, and the bonds deposited with the Comptroller were ample to insure payment at par of the notes of all failed banks. Although notes issued under the Free Banking System were inelastic and in no way as satisfactory as the earlier issues of the Safety Fund banks, the Free Banking note issue provisions, and many others, too, were closely copied in the National Bank Act.

Independent Treasury System. The disposition of public funds gave a great deal of worry to the banks and the government during this period. Government deposits, which had originally been kept in the two Banks of the United States, were gradually shifted to the state banks. This continued until the wholesale state bank suspensions during the panic of 1837 so embarrassed the Treasury officials that they decided to retain all public funds in their own possession. An act legalizing this policy was passed in 1840, but was repealed the next year. In 1846, however, the Independent Treasury System was once more authorized by Congress.

No further public deposits were made in banks until the Civil War period. Thus, for nearly twenty years, the United States Government refused to have any dealings with banks, bank notes, and the like—all payments to the government and all disbursements by it were in *specie*. The government fiscal system was entirely divorced from the banking system. Branches, or sub-treasuries, were established to aid the Treasury in carrying on the financial and fiscal functions of the government. This Independent Treasury System worked fairly well as long as the government could maintain itself on a specie basis, but the tremendous burden of financing the Civil War forced the Treasury to return to a credit basis and to "patronize" the banks once more. An objection to the system was that it locked up money when taxes were being collected, and paid it out to meet expenses, regardless of the country's need for currency. The system was finally abandoned alto-

gether in 1921, and the sub-treasury functions were transferred to the Federal Reserve banks.

Basis of the National Bank Act. By the Legal Tender Act of February 23, 1862, the Congress authorized the issue of an irredeemable Treasury-note currency. This was the government's answer to the suspension of specie payment by most of the banks, and to the public fear that these suspended banks would issue worthless paper money and lend it to the Treasury.

It was at this juncture that a system of national banks patterned after the free banks of New York State was conceived by Salmon P. Chase, Secretary of the Treasury, as a means of aiding in the exigencies of Civil War finance. He hoped that such a scheme would be the means of furthering the sale of government bonds and, at the same time, of providing a circulating medium during the war.

The proposed bill was defeated twice in the House, despite the recommendations of Chase and Lincoln. Eventually, however, it was forced through the Senate by political party tactics, and with the House barely concurring, the bill became law on February 25, 1863. This original Act was quite unworkable and unpopular with the banks, only 135 coming into the system before November 28, 1863. Hugh McCulloch, an officer of the State Bank of Indiana, who had come to Washington to oppose the bill and remained to become the first Comptroller of the Currency, engineered a complete revision of the bill in 1864. Although these changes made the bill more attractive, only four hundred and fifty state banks changed over into the system in 1864. By that time it was apparent that some method was needed to force the state banks into the national system. For this purpose, a tax of 10 per cent on state bank notes was levied by the Act of Congress of March 3, 1865. While this tax was not effective until July 1, 1866, the state banks immediately converted almost in a body into the national system.

Under the Act, as amended in 1864, each national bank was required to purchase, and to leave on deposit with the Treasury, government bonds equivalent to one-third of its capital, subject to a minimum requirement of \$50,000 in bonds for each bank. The government took no chances on getting its share of the bank's capital; deposit of the bonds was a condition precedent to opening as a national bank. Against this forced loan, politely termed bond deposit, the bank could issue circulating notes up to 90 (later, 100) per cent of par value, with the provision that the Comptroller might require the deposit of additional bonds.

The national banking system was not firmly established in time to aid much in financing the war. In fact, only \$98,896,488 of national bank notes was outstanding in April, 1865, when Lee surrendered. However, it did furnish a national currency uniform in appearance and in quality. Another advantage was the practical elimination of the state banks; such a serious blow was dealt them that records of their activities were not kept from 1864 until 1895, when a survey of the Comptroller of the Currency showed that they had regained enough importance to represent three-eighths of the banking capital of the country.

Defects of national banking system. The advantages of a standard currency circulating at par throughout the nation are incalculable; yet it must not be overlooked that the national bank note issue did not possess many of the other requisites of a good currency. Being based on bonds instead of commercial transactions, it was singularly unresponsive to changes in the public need for currency. Rather, the opposite was true; it was *inversely elastic*, since it was profitable for the banks to sell bonds and to retire their notes in anticipation of business activity, which would cause bond prices to decline. Conversely, toward the end of a boom, when government bond prices were low, it became profitable for them to buy bonds and force the resulting notes into circulation, even though they were not needed by business at the time.

The national system was characterized by an absolute lack of credit control. There was no centralization of reserves or provision for flexibility in reserve requirements. Reserves were also dangerously pyramided. The deposit credit activities of the system were not regulated or coördinated. The sole control exercised was through note issue and periodical audits of the individual banks. Bank examination was used in lieu of the credit control which was actually needed. The system had many other defects which are of only historical interest to present-day students of banking, and which, consequently, will not be treated here.

Attempts to reform the system. Recurring cycles of credit contraction and expansion, actual "shortages" of bank notes during panic periods, and failures of banks caused the American Bankers Convention at Baltimore in 1894 to advocate the issuance of currency under the protection of a joint guaranty fund (safety fund) as in Canada. This Baltimore Plan, as it was called, led to agitation for currency reform and to the appointment of the Indianapolis Currency Commission by the business interests of the country.

The Commission's recommendations were partially fulfilled by the "Gold Standard Act" of 1900. This Act liberalized several requirements of the National Bank Act. Minimum capital requirements were reduced from \$50,000 to \$25,000, and the banks were permitted to issue notes up to 100 per cent of par value (not to exceed market) of the bonds deposited. This liberalization of the Act, as had been planned, greatly stimulated the formation of new banks, especially in the lower capital group. This was designed to alleviate the alleged shortage of bank notes, but it weakened the banks considerably.

The panic of 1907, which was accompanied by a shortage of currency, widespread bank failures, and suspension of specie payment, again dramatically called attention to the defects of the banking and credit system. Congress passed a *relief* bill, the Aldrich-Vreeland Act of May 30, 1908, which permitted the issuance of emergency notes, based on commercial paper, by groups of banks organized as "National Currency Associations," a provision which was not utilized until 1914, when the financial disorganization attending the war in Europe caused the issuance of \$1,121,000,000 of this emergency currency. By 1916 the notes of the Federal Reserve System, which began to function in November, 1914, replaced all of these emergency notes.

The National Monetary Commission, composed of Senators and Representatives, was also authorized by the Aldrich-Vreeland Act. This Commission immediately embarked on a very extensive investigation of banking at home and abroad. The results of the investigation were published in several volumes, but little else came of it, because the Republican party lost the next national election.

Federal Reserve Act. The Democratic party, which took over the control of Congress in 1913, would have nothing to do with the Republican-appointed National Monetary Commission or its works. Instead, the Banking and Currency Committee of the House of Representatives engaged experts and proceeded to frame a bill of its own. The outcome was the Federal Reserve Act of December 23, 1913. Because of political necessities within the party, this Act, as finally passed, constituted a compromise between a central bank and a system of local bankers' banks. It authorized a central banking system without a central bank, and a governing board at Washington with none too well defined powers. It sought to concentrate the bank note issue function in the new Federal Reserve System, but even this was not accomplished until much later. Al-

though many extravagant claims have been made as to the benefits derived from the Federal Reserve System, few of them can be substantiated beyond the danger of successful contradiction. Panics, depressions, violent fluctuations in interest rates, collection charges, bank failures, a limited money market, lack of leadership and practically all of the shortcomings of the old banking system have occurred under the Federal Reserve System, in varying but alarming degrees. Dissatisfaction with the system culminated in the issuance of instructions by President Franklin D. Roosevelt to Treasury experts to study the feasibility of a thorough reorganization of the whole Federal Reserve structure.

Present banking institutions. A rapid-fire survey of the institutions comprising the American financial system will aid in understanding those covered more fully in later chapters. Although still in a process of evolution, some of these institutions have reached a high state of development and specialization.

The field may be roughly divided into those concerned with raising long-term funds (generally capital), known as investment banking institutions, and those concerned with short-term funds (generally bank credit), known as commercial banking institutions. No definite line of demarcation can be drawn between these two major divisions as there is a great deal of overlapping and considerable duplication of activities. Thus, in 1946, the historical agencies of short-term credit, the commercial banks, had more than half of their earning assets invested in bonds. This new development would have warranted their inclusion in the investment banking category at least to the extent of the change in their function. Furthermore, during the Roosevelt administration, the Federal government engaged in both long-term and short-term financing on such a grand scale that special treatment of government banking is necessary to present a realistic picture of the financial field.

From the foregoing, it is clear that any classification is for convenience of exposition and not scientific finality. With this limitation in mind, institutions engaged in investment, commercial, and government banking activities will be briefly sketched.

Investment banking institutions. *Investment banks* have been developed to raise the permanent capital of modern business. Through them may be financed not only the fixed capital, but also a varying part of the working capital, ranging from minimum requirements in most cases to maximum requirements in occasional

instances, any balance of ordinary working capital and emergency working capital being supplied by the commercial banking system. Since, ordinarily, these institutions are not publicly owned, they are loosely called private bankers. Traditionally, they are partnerships closely identified with one or more financially powerful families, although latterly there has been a growing tendency to incorporate and, in some few cases, to offer their stock publicly.

Savings banks are really investing institutions for their depositors and, consequently, fall in the investment banking category. In most of the eastern states they are organized on a mutual basis; in the rest of the country they are generally stock institutions. Savings banks, particularly the mutual ones, have displayed marked stability. While they furnish a popular means of indirect investment for a multitude of small savers, they are of regional importance for the most part.

The *Postal Savings System*, run by the Post Office Department, consists of about 8,000 post offices designated by the Postmaster General as savings *depositories*. The funds handled by them were quite small and of no practical importance from their opening in 1911 up to 1930. However, loss of banking confidence immediately thereafter caused the system to jump from 466,401 depositors with deposits of \$175,000,000 in 1930 to 2,342,133 depositors with deposits of \$1,187,186,208 on June 30, 1933. Thereafter, deposits continued to increase much more gradually until (including interest and outstanding savings stamps), they amounted to approximately \$2,900,000,000 at the end of 1945.

Building and loan companies are savings institutions which devote their assets to urban mortgage banking almost exclusively.

Federal land banks and the comparatively unimportant *joint-stock land banks* confine their activities to agricultural mortgage lending. A very small part of their funds is supplied by stockholders, the balance being raised by the sale of bonds in the capital markets.

Insurance companies are agencies of indirect investment for policyholders. They play an important part in mortgage financing, both urban and rural. In addition, they figure heavily in the bond market through their purchases for portfolio purposes.

Investment trusts are also investing institutions. Handicapped by a mushroom growth in the late 20's, they, nevertheless, play an important rôle in the capital market.

Trusts, under the control of trust companies and the trust de-

partments of commercial banks, are of tremendous and growing importance in the field of long-term finance. They furnish a service of capital conservation and a means of indirect investment for the wealthy.

Commercial banking institutions. The institutions engaged in commercial banking will now be briefly sketched. This classification covers those institutions and agencies which are predominantly concerned with short-term credit. As indicated earlier in this chapter, these institutions do not confine themselves to the short-term field. Dependent upon the stage of the business cycle and general financial policy and conditions, they depart in varying degrees from this short-term ideal.

The Federal Reserve banks, in carrying out their central bank functions, are the very base, center, and top of our commercial banking system. They are the source of primary credit, the center for enforcing coöperation among the member banks, and the heart of the credit control mechanism of the Federal Reserve System.

There are twelve Federal Reserve banks, coördinated as regards credit control and policy under the Board of Governors at Washington. Each Federal Reserve bank is a bankers' bank, primarily serving only the member banks of its district and the government. While the Reserve banks were intended to be banks of discount, the major portion of their credit is put into circulation by means of advances to members and the purchase of government securities. They have twenty-four branches and use various foreign central banks as correspondents.

Federal Reserve System membership is mandatory for all national banks, and permissive only for those state-chartered banks and trust companies which meet the national standards as to capital and surplus, or agree to meet the requirements within a reasonable time. These requirements for state-bank membership have been gradually lowered in an effort to enlarge the system by inducing more state-chartered institutions to assume the obligations of membership. As of December 30, 1944, only 1,789 state banks belonged to the Federal Reserve System, while 7,181 state banks were not members.

Congress, in 1933, moved to unify the nation's banking system further in connection with setting up the Federal Deposit Insurance Corporation. This law permits mutual savings banks, Morris Plan banks, and *other incorporated banking institutions engaged in similar businesses*, to become full-fledged members. While less than

half of all commercial banks are now members of the system, they are the more important ones; they hold about 85 per cent of the commercial bank deposits of the country.

The ability of the state banks to leave the system at will on short notice, which has been an outstanding weakness of the central banking structure, is now circumscribed for insured banks. However, member banks, other than national, can leave both the system and the deposit insurance plan if they find it to their advantage to do so, and even national banks can convert to state charters and leave the system. Practically, however, the conditions which would cause them to seek to resign are the very ones which would make their continued membership almost imperative from a credit and social standpoint.

Ownership of the Federal Reserve banks differs from that of the other great central banks, in most of which stock is held directly by the public or by the government. The Federal Reserve banks are not only bankers' banks, they are owned by banks. In fact, the entire stock of each Reserve bank is held exclusively by the banks which are members of the Federal Reserve System in its district.

The *national banks* are the nucleus of our commercial banking system. On December 30, 1944, there were 5,031 licensed national banks in operation, with assets of \$76,949,859,000. The national banks comprise about one-third of all the commercial banks and control 56 per cent of the total commercial banking assets. Although during the boom period ended in 1929 they engaged in nearly every type of financial activity, the depression which followed has since tended to restrict them more closely to deposit banking. While the Banking Act of 1933 forced them to abandon their security affiliates, a number of forces to be discussed more fully hereafter have made commercial banks large-scale investors in bonds. Likewise, their trust departments seem to be established on a sound and permanent basis. As for their other non-commercial banking activities, it would be dangerous to hazard a guess regarding their future. Legislation, on the one hand, and the desire for larger profits, on the other, will determine the extent to which the banks will go further afield.

State banks and trust companies, numerically but not in total resources, exceed the national banks. On December 30, 1944, there were 8,970 of these licensed state-chartered institutions with total assets of \$61,001,400,000. There were thus nearly two state-

chartered institutions for each national bank, and they controlled 44 per cent of the commercial banking assets of the country.

Contrary to general impression, the state institutions withstood the 1933 banking crisis somewhat better than the national banks. While 22 per cent of the state banks and trust companies closed as compared with 18 per cent for the national system, the former lost only 9 per cent of their total resources as contrasted with a decrease of 10 per cent in national bank resources. Thus, the duality of the banking system was not materially altered by the banking upheaval.

The banking standards in the eastern states are so high that there is little difference between the state and national institutions from the standpoint of safety or service. In the West and South, however, national banks enjoy some special prestige. In the state-chartered group, the trust companies have had an amazing growth in recent years.

Commercial paper houses are institutions, generally partnerships, which give borrowers access to the money market. While they formerly functioned as brokers, they now are dealers, purchasing and reselling the short-term (three months to one year) paper issued by business. The commercial paper dealer, as a rule, neither guarantees nor endorses the paper he sells. There are about three dozen dealers in the entire country, with more than half the volume handled by seven of this number. Beginning in 1921, commercial paper volume declined until it had become relatively an unimportant factor in the money market in 1946.

Consumer financing institutions occupy a position of rapidly growing importance in the field of short- and medium-term credit. Mass financing, as it is called, is based on personal credit and is carried on by several different types of institutions. Methods of operation and services rendered vary widely. As these are covered in detail in a later chapter, it will be sufficient merely to list them here without further explanation. They are Morris Plan banks, industrial banks, personal finance companies, credit unions, and various types of sales-finance companies. These financing agencies are collateral to the commercial banking system rather than an integral part of it.

Government banking institutions. Historians of the future will point to the Federal government banking activities of the middle 30's as an outstanding example of government participation in private banking activities, in fact, as the beginning of a new era

in American banking. Beginning with March, 1933, the Federal government, through agencies incorporated for the purpose, loaned more than ten billion dollars in less than three years. About half of these loans were for a twelve-year term or longer, the maximum being forty years. This development has continued so that now, even if the government should resolutely decide to retire from the banking field, and indications are to the contrary, it would take years to liquidate the many agencies involved. Furthermore, the certain political repercussion to such a step makes it highly improbable.

These government lending agencies defy classification, as they were created by arbitrary legislative enactment rather than developed by evolution. On a rough and summary basis, the larger ones may be grouped as follows:

Investment banking group, including the Farm Credit Administration, Farm Security Administration, Federal Farm Mortgage Corporation, Federal Home Loan Banks, Federal Housing Administration, Federal Land Banks (discussed earlier), Federal National Mortgage Association, Federal Public Housing Authority, Federal Works Agency, Home Owners Loan Corporation, Inland Waterways Corporation, Land Bank Commissioner, Production Credit Corporations, Reconstruction Finance Corporation, Reconstruction Finance Corporation Mortgage Company, Rural Electrification Administration, Tennessee Valley Authority, United States Housing Authority, United States Postal Savings System (discussed earlier), and United States Maritime Commission.

(2) *Commercial banking group*, including Commodity Credit Corporation, Export-Import Bank of Washington, Federal Intermediate Credit Banks, and Regional Agricultural Credit Corporation.

(3) *Coöperative and consumer credit*, including the Central Bank for Coöperatives, District Banks for Coöperatives, Electric Home and Farm Authority, Federal Credit Unions, and Tennessee Valley Associated Coöperatives, Inc.

(4) *Miscellaneous group*, including Federal Deposit Insurance Corporation, and the Federal Savings and Loan Insurance Corporation.

Questions for Study and Review

1. What contributions to banking progress were made by the Suffolk System?
2. What contributions to banking progress were made by the Safety Fund System?

3. What contributions to banking progress were made by the Free Banking System?
4. Why was the Independent Treasury System established?
5. Discuss the reasons for the passage of the National Bank Act.
6. What were the outstanding defects of the national banking system?
7. What attempts were made at currency reform in the period 1890-1910?
8. On the basis of current figures, compare the national banking system with the state banking system.
9. List the various institutions comprising the banking system as a whole.
10. Name ten institutions through which the government participates directly in banking activities.

Problems

1. Assume that, in the days of George Smith, New York exchange in Chicago was at a premium of one per cent. He was able to reimburse his New York account through the purchase of drafts drawn by New York in payment of agricultural purchases at a discount of, say, one per cent. Calculate gross income in per cent on an annual account turnover of twelve times.
2. On the basis of the figures in the latest Federal Reserve Bulletin, determine the total government credit competing with bank credit in the following categories:
 - (a) Farm mortgage loans.
 - (b) Home mortgage loans.
 - (c) Reconstruction Finance loans and investments.
3. Calculate the percentage of each item listed in Problem 2 to the total loans of member banks.
4. What would the annual loss have been on \$100,000 in circulating notes actually loaned by the state banks on August 1, 1866, if they had required a twenty per cent minimum balance and received $6\frac{1}{2}$ per cent interest on loans?

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CHAPTER 6

Organizing a Bank

Are new banks needed? From an all-time peak of 30,812 in 1921, the total number of banks in the United States dropped in June, 1933, to 14,624. Nearly 4,000 banking institutions failed to reopen after the "holiday" of March, 1933. The era of unbridled increase of unit banks was ended by the wave of bank failures beginning in 1921. The number of banks—which for forty years had increased six times faster than population, until there was a bank for each 4,000 of population—decreased after 1921 at an unprecedented rate. Financial, business, and government attempts to stay the tide were of no avail; economic law was at work. Improved transportation, changed market centers, and the increased size of business enterprises doomed many of the traditional independent small local unit banks. The American system of banking is a free one only in a legal sense; it is not free from economic law.

About half of the banks we had in 1920 have passed from the American scene; yet there remain in the United States more independently operated banks than there are in all other countries combined. Counting branches, there is a bank for each 8,000 of population. The record, past or present, lends no encouragement to the starting of a new bank. Nevertheless, hardy souls will make the attempt unless, and until, forbidden by law. He who would organize a bank might well adopt the philosophy of the following display head of a popular English advertisement: "Advice to People About to Get Married—Don't."

Banks are business institutions. It should be clearly understood that a bank is, from the viewpoint of its stockholders, a business enterprise, and nothing more. Because of the social nature of

certain of its operations, such as note issue and deposit, banking has been subject to a very large degree of public regulation in this country. Yet, this should not obscure the fact that the bank is organized by its stockholders to earn them a *profit*.

There have been so many bombastic speeches and articles on the service of bankers to humanity that it is not amiss to recall that burial in holy ground was denied their banking forebears as late as 300 years ago. The banker, supposedly the most unsentimental of men, is at times prone to go completely sentimental when he discusses the banking business. Banks are service institutions, to be sure; but, if properly managed, the business pays them splendid and sometimes extraordinary profits for their services.

The idea that banking is far removed from all considerations of private gain is indirectly fostered by the banking laws, which seek to limit profit to the entrepreneur for organizing a bank. Under the laws, no bonus stock may be given, and promotion fees are definitely prohibited. Consequently it is necessary for the one who starts a bank (promoter) to derive his compensation by indirect means. Thus the promoter and his backers are usually repaid for their efforts by the difference between the subscription price and the market price of the stock shortly after it is issued. Heretofore, there has often been a wide spread between the two, because of the profit possibilities attaching to a bank charter. Bank stocks generally sell considerably above their book value. At the 1929 peak, the market prices of New York City bank stocks averaged 4.10 times book value for twenty-three leading banks. While their prices dropped in the succeeding depression along with other stocks, even at the depression levels of 1933 the stocks of eighteen of the larger New York banks commanded a price of 1.19 times book value. Although few new banks were started in the great boom that ended in 1929, the owners of many of the existing ones cashed in on the speculative fever by stock split-ups (permitted by the McFadden-Pepper Act of 1927) and stock increases. The capital raised by the sale of new stock at inflated prices was used to open branches, organize affiliates, purchase competing institutions, and expand in other ways.

Motives for organizing a new bank. While many banks have been started for stock-jobbing profits, there are several other ways whereby the organizers of a bank may profit from its organization, regardless of its future success or failure as an operating unit. For instance, it is possible, under the law, to charge heavy legal fees to

a bank for the "onerous" job of drawing up the necessary papers of incorporation. More questionable, frozen loans, mortgages, or securities may be shifted to the new bank. A larger line of credit than could be obtained at existing institutions may also be the chief incentive of the organizers. As a matter of fact, this desire for a larger line of credit for the promoters has undoubtedly been responsible for the organization of more banks, numerically speaking, than has any other factor. Obviously, these observations apply only to the medium-sized and smaller banks. The large capital requirements of the larger banks necessitate sounder reasons for their organization.

The human element, which looms large in all banking business, is also the cause of the organization of many new banks. A bank vice-president, with even a light attack of ambition, is very likely to walk across the street and open a new bank so that he may be president immediately without having to wait for death to clear the way in the old bank. The inherent "respectability" of banking causes many a bank to be started solely to provide berths for wealthy individuals who would like to play "banker." Dissension among bank stockholders or directors sometimes results in the formation of a rival institution, usually called a "spite bank."

Naturally, if there is not an economic need for a bank, it will tend to disappear sooner or later, no matter what may be the underlying motive for its organization. Sound economic motives should be the real basis for the organization of a new bank. For instance, the inadequacy of existing banking facilities in a community furnishes a sound and proper economic basis for the launching of a new bank.

"Shoe-string" banks. Many banks have been started for far more sinister reasons than the foregoing ones. Bank charters have ever proved an irresistible attraction to clever, unscrupulous men. This open door to financial power through use of the funds of others has been widely utilized. Naturally, the banking supervisory authorities have stopped most such schemes "a-borning"; yet far too many persons have succeeded in opening banks which have been frauds from the start.

Some of the shoe-string banks, so common from 1825 to 1850, and in some states more recently under state deposit guaranty, were of this breed. The method employed in their organization is interesting, as practically no capital was used in starting them. The promoter simply borrowed the "capital" of the new bank

through the pledge of its stock as collateral for a loan. Thus, Bank A, which might or might not be owned by the promoter, would advance enough to start Bank B, the stock of which would be pledged to secure the loan as soon as issued. Bank B, in turn, would advance enough to start Bank C, on the same basis; and so on, from bank to bank. Thus, men without the proverbial shoe string are able to start as many banks as they feel necessary for their purposes. Sometimes as many as fifty banks may be organized by these methods, with the first bank alone having any substantial capital. For instance, at their failure in 1926, the Bankers Trust Company of Atlanta (a holding company and not a trust company) and the Bankers Finance Company of Jacksonville acted as fiscal agents for a chain of some 120 Georgia banks and 60 Florida banks. If the Superintendent of Banking in one state interferes, the next bank is started across the line, in another state. Because of lack of coöperation between the banking authorities of the different states, shoe-string banks usually have been state-chartered institutions.

The "shoe-string" idea is not necessarily limited to the organization of additional banks. The failure of the Bank of United States in December, 1930 disclosed the organization of affiliates of all kinds—real estate, insurance, hotel operating, and other business enterprises—as well as the establishment of branches.¹ In passing,

¹ The *New York Times*, February 2, 1931, listed loans of \$24,720,381,000 to the following sixty affiliates and subsidiaries, most of which were holding companies:

Bankus Corporation, City Safe Deposit Company, Colonial Safe Deposit Company, Municipal Safe Deposit Company, Municipal Financial Corporation, Delaware Bankus Corporation, Antur Holding Corporation, Chesterford Realty Corporation, Landberry Holding Corporation, Minerva Development Corporation, 101 Wall Street Corporation, Vanfred Realty Corporation, Warwick Development Corporation, Westford Development Corporation, Rurik Holding Corporation, Storm Development Corporation, City Financial Corporation, Beverwyck Holding Corporation, Clarence Holding Corporation, Jourdan Holding Corporation, Manhattan Square Berensford, Inc., Ranelagh Holding Corporation, Townsite Holding Corporation, Trudaine Development Corporation, York Investing Corporation, Broadway Continental Corporation, Active Property Corporation, Barbes Realty Corporation, Chaumont Development Corporation, Claremont Development Corporation, Duros Holding Corporation, Grenelle Holding Corporation, Maubert Holding Corporation, Messine Holding Corporation, Monceau Holding Corporation, Rella Development Corporation, Sulpice Holding Corporation, Tremont Development Corporation, Tourmont Realty Corporation, Vendome Holding Corporation, Villette Holding Corporation, Vincennes Holding Corporation, Wagram Holding Corporation, Avran Holding Corporation, Consolidated Indemnity and Insurance Company, Bolivar Development Corporation, Premier Development Corporation, Merit Mortgage Corporation, Abenad Realty Corporation, San Remo Towers, Inc., 70 Wall Street Corporation, Sun Holding Corporation, Arnat Leasing Corporation, Rex Leasing Corporation, Stonepit Holding Corporation, Charonne Development Corporation, City First Mortgage and Title Corporation, Lamauch Holding Corporation, Southford Holding Corporation, Lenoir Holding Corporation.

it might be well to point out that this bank, which was the largest that ever failed, was at first denied the right to use the name on grounds of public policy. Permission, however, was later granted. It is significant to note that the Superintendent of Banks of the State of New York, who granted the permission, shortly thereafter became a high executive officer of the Bank of United States—a private institution.

The holding company device, which, as will be seen in a later chapter, may be used to strengthen a group of unit banks, has also been used to permit promoters to control a large number of banks with little capital. Thus, the Detroit Bankers Company, another ill-fated banking group, obtained control of 250 banking offices with the accounts of 900,000 Detroiters, and resources of more than \$800,000,000. The Detroit Bankers Company was a holding company capitalized at \$50,000,000, divided into 2,500,000 shares of common stock. In addition, there were 12 "trustee" shares at \$10 each. These trustee shares, taken by the twelve organizers, had exclusive voting rights in the election of directors for a period of five years. The common stock was exchanged for the shares of the banks which were taken over. The investment of \$1,200 in the trustee shares thus gave control of the holding company. Exchange of shares and borrowing from controlled banks permitted the extension of this control over subsidiary banks. Twelve hundred dollars controlling eight hundred million in resources is the "farthest north" of the shoe-string idea with which this writer is familiar in banking.

Prerequisites for a successful bank. Before a new bank is started, there should be not only a clear-cut economic need, but also the reasonable certainty that adequate capital and banking ability can be assembled. As capital requirements, both state and national, are quite low, it is ordinarily not difficult to raise enough capital to comply with the law. But this amount of capital is only a *minimum* requirement set from the standpoint of safety. Nowadays the amount is far too small to cover capital requirements from the standpoint of competition, earnings, or even safety. Some states have a minimum requirement of \$10,000, which may be just about adequate for a good-sized delicatessen but, obviously, is too small for any kind of banking institution, no matter how small or poor the community. A sound bank just cannot be run on small change.

Although reduced several times in an effort to meet state bank

competition, the capital requirements for national banks are much higher. They have, fortunately, been raised in recent years. A minimum capital of \$50,000 is permitted in places of 6,000 population or less; a minimum capital of \$100,000, for any place with a population greater than 6,000 and not exceeding 50,000; a minimum capital of \$200,000, for all larger places, except that in the outlying districts of such cities a minimum capital of \$100,000 may be permitted if state laws permit the organization of state banks with a capital of \$100,000 or less. The capital of state-chartered banks seeking admission to the Federal Reserve System must equal that required of national banks located in places of like size.

Prior to the Banking Act of June 16, 1933, a minimum capital of \$25,000 was permitted in places of 3,000 population or less, but experience demonstrated that this minimum was far too low. Bank failures have been much more prevalent in the lower capital brackets. After all, it seems axiomatic that those who would engage in the business of handling the funds of others should come recommended by funds (capital) of their own.

It is far more difficult to get the requisite banking ability. First, there are not enough good bankers to run the 14,000 banks now in existence, without adding the burden of even one more bank. Second, the comparative rarity of good bankers means that the incentive of a high salary must often be held out, with the result that the small bank cannot afford to pay the salary necessary to secure good management. Even if operated at the peak of efficiency, the entire earnings of a \$50,000 bank would not be large enough to interest a really first-class banker.

Bank Management, a book published by the American Institute of Banking and sponsored by the American Bankers Association, is authority for the following:

Commercial banking, therefore, requires a fundamental knowledge of every process of commerce itself, from agriculture and other production to final consumption or other use.

Obviously, thousands of bank officers could not qualify under this definition. This opinion is frankly admitted in another quotation, attributed to George E. Allen, from the same book:

A successful banker is composed of about one-fifth accountant, two-fifths lawyer, three-fifths political economist, and four-fifths gentleman and scholar—total ten-fifths—double size. Any smaller person may be a pawnbroker or a promoter, but not a banker.

Locating the bank. Even if sufficient capital is in sight, and competent management is available or can be developed, there remains the troublesome problem of locating the bank. Selection of a good location is as difficult and important for a bank as for any other type of business enterprise. The banker needs a location which offers not only convenient availability, but also the prestige of address and a high degree of physical safety. Naturally, all these qualities in a site may be secured if the banker has no regard for rental cost. Moreover, this has been the trouble in the past; banks have paid entirely too much rent either directly, for leased quarters, or indirectly, by investing too much in an owned building. In the future, banks will have to secure more for the rental dollar, however spent, in order to receive the approval of the bank supervisory authorities.

Location of retailing institutions has become almost an exact science, yet bank location has been given little attention by either bankers or real estate dealers. Banks have too often been established in a more or less haphazard fashion—if the choice of location was poor, the bank either failed or moved. Particularly has this been true of branches. Some banks allow three years—others, five years—for a branch to make its proper contribution to profits before unprofitable branches are discontinued.

In addition to considerations of safety, convenience, and prestige, the banker should, if possible, secure a location which will offer diversified business from the standpoint of the industries served, size of accounts, and psychology of the depositors. Single-industry communities, or communities with a highly volatile population, should be avoided, unless the banker is willing to maintain a much higher degree of liquidity than is necessary in a more normal locality.

Restrictions on the amount of investment in bank premises are embodied in one of the provisions of the Banking Act of 1933. It provided that *thereafter* no national bank without the approval of the Comptroller of the Currency, and no state member bank without the approval of the Federal Reserve Board, might invest directly or indirectly in bank premises any amount in excess of its capital stock. Think of it! Legislation was found necessary to prevent investment in banking quarters *in excess of paid-in capital stock*. This maximum is entirely too high. An investment, in buildings and facilities, of more than 25 per cent of contributed capital is usually unwise. In some cases there may be justification

for a larger investment, but the bank should be prepared to defend such a policy. In making such an investment, the bank places itself on the defensive so far as the public and the supervisory authorities are concerned.

What kind of bank—state or national charter? A new bank may seek either a state or a national charter. Since the passage of the McFadden-Pepper Act in 1927 and the Banking Act of 1933, there is less difference between the two systems than formerly, particularly in the East, where state inspection standards are generally high. The McFadden-Pepper Act removed many of the restrictions to which national banks were subject as compared with state banks. The aim of the Act was to place the national system on an equal, competitive basis with the state systems. As a practical matter, this has been accomplished, although legally there are still wide differences between the two systems.

The national *minimum* capital requirements, for instance, are higher than those of most states. National banks are involuntary members of the Federal Reserve System, whereas state banks still have the option of refusing membership. Increasingly, however, these differences are proving more theoretical than actual; national banks may do practically anything that either a state bank or a trust company is permitted to do.

Before the passage of the Banking Act of 1933, public opinion generally favored banks with national charters because of the higher capital and Federal Reserve membership requirements. Yet, paradoxically, because of these same requirements, most banks sought state charters.

The trust company form of organization has been especially favored of late, particularly in the larger cities. Vigorous advertising and general publicity in connection with their search for trust funds to administer have created a wide public acceptance of them for ordinary banking purposes. It is now apparent that not all trust companies have lived up to this conception of high trust which they inculcated in the mind of the public; yet, as a class, they enjoy unusual confidence and popularity among depositors.

Actual steps in organizing a bank. Free incorporation of banks is now permitted; but this term is a misnomer, since the approval of the regulatory authorities must be secured at various stages of the organization. The word "free" means that it is no longer necessary to obtain a special charter for each bank from the legislature.

Nowadays, anyone may engage in the banking business provided that he complies with the law and *secures the approval of the supervisory authorities*. Obtaining this approval is the only serious hurdle to overcome. Bank incorporation is, otherwise, fairly easy, although it is a long-drawn-out process.

The several steps necessary in organizing a national bank, which are also typical of the procedure in starting a state bank, will now be explained in detail.

1. A formal application for reservation of title and *authority to organize* must be filed with the Comptroller of the Currency. A standard form, for this purpose, is furnished, upon request, by the Comptroller. This form contains many questions covering the sponsors, plans, and prospects of success of the new bank. The application must include such details as the population, existing banking facilities, and economic conditions of the community which the new bank proposes to serve. Great care should be exercised to give all the information requested on the application form; otherwise, the permission of the Comptroller to proceed with the organization of the bank will be refused on the ground of insufficient information. Such refusal is very undesirable, as it may prejudice future consideration of the application.

In particular, the Comptroller will refuse to approve an application unless the preliminary information furnished in this application indicates that the bank has a reasonable prospect of success and is the result of a strong local demand for banking facilities which is not being adequately met by existing institutions. Every effort is made to rule out the professional promoter, as indicated by the following quotation from *Instructions of the Comptroller of the Currency Relative to the Organization and Powers of National Banks*:²

The Comptroller of the Currency will refuse to approve any application for the organization of a national bank that contemplates or provides for any promotion fee, or that proposes to set apart or apply any part of the moneys collected from subscribers for the payment of promoters' fees, for the sale of stock, or for service in starting and opening any such bank, whether provided for by contract with proposed bank or by contract with the subscribers to the stock of the proposed bank.

During the entire period of organization, the stationery must indicate clearly that the bank is "organizing," or must bear the

²This book may be secured, for a nominal sum, from the Government Printing Office at Washington.

heading "Organizing Committee." This requirement puts the public on notice that the bank is not yet in existence in all dealings with the organizers.

2. A check to cover the cost of investigation of the proposed venture by a bank examiner must accompany the original application. The charge fixed by the Comptroller for this investigation is usually \$100. A national examiner in the district of the proposed bank is detailed to conduct a thorough investigation of the whole matter. This examiner is specifically instructed to consider all the factors bearing on the proposal, including, in particular, the following:³

First, the general character and experience of the organizers and of the proposed officers of the new bank; second, the adequacy of existing banking facilities and the need of further banking capital; third, the outlook for the growth and development of the town or city in which the bank is to be located; fourth, the methods and banking practices of the existing bank or banks, the interest rates which they charge to customers, and the character of the service which as quasi-public institutions they are rendering to their community; fifth, the reasonable prospects for success of the new bank if efficiently managed.

In addition, if a protest is filed, the examiner personally interviews those persons for and against the proposed new bank. The Comptroller also consults and obtains a report from the Federal Reserve bank of the district, from the State Banking Department, and from any other sources he may deem advisable.

3. If, after receiving these various reports, the Comptroller approves the organization of the bank, he forwards the necessary blanks and instructions for the completion of the organization. Also, he reserves the name for a period of sixty days if the name does not conflict with that of any other bank in the community.

The Comptroller's approval authorizes the organizers to accept subscriptions to the stock of the bank. These subscriptions are required by law to be in cash, and at least 50 per cent must be paid in immediately. The remaining 50 per cent must be paid in five equal monthly installments, or sooner if so authorized by the directors. Sale of the stock at a premium of not less than 20 per cent is required by law so that an immediate surplus may be created. Such a surplus permits the absorption of the costs of organization and operating losses of the first year or two, without impairment of capital. Then, too, the law provides that banks must carry 10 per cent of current net profits to surplus, until surplus equals the capital

³*Instructions of the Comptroller of the Currency Relative to the Organisation and Powers of National Banks.*

stock A paid-in surplus of 100 per cent of capital makes the foregoing provision inoperative.

4. As soon as the stock is subscribed, the Articles of Association are executed, signed by at least five *natural* persons; and one copy is filed in the office of the Comptroller of the Currency. The Articles of Association correspond to the certificate of incorporation in a business corporation, and serve the same purpose. At the same time, or later, the signers of the Articles of Association must similarly execute and file the Organization Certificate. The principal object of this certificate is officially to record the name, financial net worth, and residence of each shareholder in the new bank.

5. The directors are now elected. (There must be not less than five and more than twenty-five.) They immediately take the oath of director, either singly or jointly, and it is filed with the Comptroller. Officers are then elected by the directors. A president, vice-president, and cashier, at least, must be elected, although additional officers are often chosen at the same time. The official signatures of the officers are then filed in Washington.

6. Other certificates—including Certificate of Payment of Capital Stock and Compliance with Legal Requirements, Certificate of Payment of Capital Stock Installments, Oaths of Directors, Application for Stock in the Federal Reserve Bank, Certificate of Federal Reserve Agent, Certificate of Directors Specifying the Amount of Capital—are then filed variously with the Comptroller, the local Federal Reserve bank, or the Board of Governors of the Federal Reserve System. After all of these certificates have been filed and after the subscription to the Federal Reserve bank stock has been paid in, the Comptroller, if nothing has occurred to change his mind in the interim, will issue a "Certificate of Authority to Commence Business."

At this long last, but not before, the bank is finally a body corporate and may commence business. Yet, there remains still one more piece of red tape. The Certificate of Authority must be published in a local paper for sixty days, although the bank is permitted to operate in the meantime. It should be pointed out that this last certificate is generally referred to as the "Charter" of the bank. Such by-laws as are necessary to regulate the internal management of the bank are also usually passed by the directors before operations begin.

Reasons for elaborate procedure of organization. The foregoing procedure has been designed to safeguard the public interest by

stopping undesirable banking ventures at the very outset—even before the capital is raised. While every effort has been made in the banking law to encourage, through facilitating the organization of small unit banks, the creation of adequate banking facilities for even the smallest communities, there has been, particularly in recent years, no disposition on the part of the supervisory authorities to encourage the multiplication of banking facilities in communities already well served. As a matter of fact, the opposite has been true.

Since the banking law specifies this long procedure, which must be strictly followed in the organization of a new bank, it is easy, unless too much political pressure is brought into play, for the Comptroller and the various State Superintendents of Banking to regulate the rate of formation of new banks in accordance with the public interest. Federal deposit insurance has made such regulation more necessary than ever.

Changing from a state to a national charter and vice versa. Existing state banks or trust companies may enter the national system by three different methods.

If the state institution is not in good condition, the *reorganization* method will be used. In such a case, a national bank is organized exactly as described in the preceding paragraphs. The new national bank then purchases for cash the assets of the state institution. The character, quality, and composition of the assets purchased must comply with all provisions of the National Bank Act and the Federal Reserve Act.

On the other hand, strong state institutions will use the method of *conversion*, as it is much more simple and direct. In conversion, the state institution is not liquidated; it continues as a going institution with merely a change in title. However, its capital, banking practices, and policies must immediately be made to conform to the national and Federal Reserve requirements. Under this method, the national bank is liable for all contracts of the former state institution; whereas under reorganization, such liability is not assumed. Because of this, the Comptroller arranges for an examination of the converting bank before he gives his approval or refusal.

Conversion into a national bank is permitted by the national authorities only when the state law does not forbid such conversion. If the state law does forbid such procedure, then the *reorganization* method must be used. The consent of 51 per cent of the stock is sufficient to authorize conversion.

Under a third method, a state bank may *consolidate* directly into

an *existing* national bank, without first going through either reorganization or conversion.

Disregarding for the moment the complications ensuing from relations with the Federal Deposit Insurance Corporation, it is even less difficult to switch from a national to a state charter. As state laws vary, the exact procedure cannot be given; yet, it is comparatively easy, as banks have found no difficulty in shifting from one system to the other as the occasion demanded. Favorable banking legislation by either the states or the Federal government in the past was invariably followed by a shift of banking resources from one system to the other. This was a great weakness of our dual system. The practice resulted in an unseemly competition between the state and national systems for banking resources, through the liberalization of banking laws. Much of this liberalization, dictated by competitive consideration, has been unsound and has done the banks themselves untold harm.

The McFadden-Pepper Act is an example of such legislation. While it has undoubtedly improved banking practice a great deal, the Act contains many provisions—such as the one permitting the reduction of the par value of bank stock to below \$100—which are of doubtful, if not negative, value. This is not surprising when it is considered that the Act was passed primarily to strengthen the Federal Reserve System, which had been losing compulsory membership on a large scale through the conversion of national banks into state-chartered institutions.

The Banking Acts of 1933 and 1935 attempted to attain the same ends as the McFadden-Pepper Act sought, but by a different method. Instead of endeavoring to equalize competition by liberalizing the national law, they imposed similar restriction on the state member banks (as mentioned earlier in this chapter). If these laws remain in their present form, they will exert a powerful influence toward unifying the commercial banking system by bringing most institutions into the Federal Reserve System. The Federal Deposit Insurance Corporation already has eliminated many differences between state and national banks.

Closing a bank. Up to 1933 most bank closings were involuntary. Either upon the request of the bank or upon the initiative of the supervisory authorities, the front door was locked, and a sign reading "This bank is closed by order of the Comptroller (or Superintendent of Banking)" was placed on it. After the general bank suspension of 1933, liquidation of the bank or reopening on a new basis was the problem of the banking authorities.

Voluntary liquidation of a bank by its owners has proved difficult. It is usually difficult to get depositors to withdraw their deposits. In fact, the more the directors of a solvent bank insist that they want to close, the more difficult it is for them to do so. Bankers have gone so far as to offer depositors premiums to withdraw their accounts. Closing a bank is a long-drawn-out process, and often proves quite costly to the stockholders.

Now that banking is not so profitable as it was, and since bankers are often willing to close voluntarily, legislation to facilitate liquidation would be desirable.

Questions for Study and Review

1. Why are banks organized?
2. List the prerequisites for a successful bank.
3. Is it possible to secure good management for every bank?
4. What does a bank need in a location in addition to convenient availability?
5. Give three reasons for selecting a state charter.
6. Give three reasons for selecting a national charter.
7. List the actual steps necessary in organizing a bank.
8. At what price should bank stock be sold, and why?
9. Differentiate between the Articles of Association and the Organization Certificate.
10. In what ways may a state bank convert into the national system? Indicate the circumstances under which each method would be used.

Problem

Fill in the following form by inserting the necessary detail in connection with starting a new national bank, of minimum size, in any actual city of more than 50,000 population:

APPLICATION TO ORGANIZE A NATIONAL BANK

....., 19 ..

To the Comptroller of the Currency,
Washington.

Sir: We, the undersigned, prospective shareholders, being natural persons and of lawful age, intend, with others, to organize a national banking association, under the title of "The .. .," to be located at .. ., county of .. ., State of .. ., with capital of \$.. . and surplus of \$.. ., to succeed the .. . Bank of .. . Population .. .

We request that the title be reserved and that the necessary instructions be sent to .. ., who is an actual resident of the place where the proposed bank is to be located.

It is proposed to purchase or build a banking house, the amount to be invested (including cost of fixtures) being \$.. .

It is proposed to lease or rent a banking house, the amount of annual rental to be \$.. .

We hereby further certify that no fee or commission has been paid or has been contracted to be paid, directly or indirectly, by the bank or by anyone in its behalf, to any person, association, or corporation for securing subscriptions for or selling stock in said proposed bank.

Signatures of Applicants	Residences	Businesses	Financial Strength, in Figures	Shares to be subscribed for
.....
.....
.....
.....
.....

READ THESE INSTRUCTIONS CAREFULLY

The name of the place should form a part of the title, thus, "The First National Bank of A . . .," but the name of the State should not be included.

The application must be signed by at least five prospective shareholders, preferably the proposed officers or directors

The correspondent should be a resident of the place where the bank is to be located, a prospective shareholder, and if possible an officer or director of the proposed bank.

It is not necessary for the applicants to subscribe for the entire issue of stock. Only the actual number of shares to be held by each should be stated, and each applicant should be worth financially twice the value of the stock for which he subscribes.

The following shows the National, State, or private banking institutions with which the applicants are, or have been, connected either as officers or directors:

Applicant	Institution	Position	Period
.....
.....
.....
.....
.....

(Date).....

(Signed)..... ,

**Correspondent.*

* N.B.—The correspondent is requested to furnish, as early as possible, a list of the prospective officers and directors of the proposed organization, and a statement showing their previous connection, if any, with other banking institutions.

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CHAPTER 7

Internal Organization

Bank control and management. Income, control, and risk in commercial banking are apportioned through the use of the corporate form of business. All national and state banks are corporations, as are trust companies and most of the other types of banking institutions. With certain exceptions, hereafter noted, the ordinary rules of corporation law and finance apply to them. As their business is of a quasi-public nature, the public interest in them is much greater than in a business corporation. Through statutory provision for examinations, reports, liability of directors, and general supervision, every effort is made to safeguard this interest.

In addition to the general public, the stockholders, officers, and employees all have a definite interest in the banking enterprise. They are, in a sense, partners in the venture; its operation, whether a success or a failure, affects all of them in varying degrees. Knowledge of the contribution made and the part played by each of these parties at interest will aid a great deal in understanding banking theory and practice.

Stockholders. The right to own stock, even in a national bank, is governed by the laws of the state in which the institution is located. Any individual, partnership, or corporation, which may hold other property, is permitted to own stock.

Contrary to general public impression, practically all bank stock is held by individuals. An analysis of the distribution of ownership of Chicago banks showed 83.2 per cent held by individuals; 11.4 per cent held by trustees, executors, and administrators; 2.8 per cent owned by investment trusts; 1.0 per cent held by insurance

companies; 0.1 per cent owned by other banks; and 1.5 per cent listed in the name of all other stockholders.

The same study disclosed that nearly 95 per cent of the stock of the Chicago banks was locally owned. This tendency was noted especially in the smaller and medium-size banks; the stock of the larger banks had slightly wider geographic distribution.

The analysis also clearly indicated, with the exception of a few small banks closely owned, that there was but little concentration of bank ownership either in the hands of particular individuals or in the board of directors. Less than 5 per cent of the Chicago banks had more than 30 per cent of their stock held by one individual. Directors of the national banks surveyed owned less than 18 per cent of the total stock issued by their institutions. Also, the larger banks had a smaller percentage of their stock closely held than did the medium-size and smaller institutions. As a whole, the stock of the 217 banks included in the survey was widely distributed within the geographic limits of Greater Chicago. Thus, the "money power" in Chicago was at least publicly *owned*.

This study of the Chicago banks is cited because the facts disclosed are typical of the other large cities of the country. The McFadden-Pepper Act of 1927 permits national banks to issue stock with a par value less than \$100 per share. This privilege has been widely used by banks to lower the market value of their shares and to secure a wider public distribution of their ownership. Many banks have more than 50,000 shareholders, while a few, particularly in New York City, have more than 100,000 listed as owners of stock.

Paradoxically, this widespread holding may both strengthen and weaken the banking institution. Stock may be scattered so widely that stockholders will not be interested or competent to exercise proper control over their bank; or it may be held in weak hands, and, at the first strain on the banks or business structure of the country, dumped on the market with disquieting results. Also, widespread stock ownership facilitates management by a small group having little financial interest in the institution.

Duties of stockholders. Stockholders in banks have certain duties and social responsibilities which they should not evade. The indifference of stockholders has been a contributory factor in nearly all bank failures. Heretofore, they have had entirely too little to do with the bank and its problems. This has probably been true because they have but little to do with the internal de-

tails of bank operation. In the final analysis, however, it is their bank. They are responsible if it fails, they profit to the extent that it succeeds. Since they elect the directors, they cannot escape ultimate responsibility for its general operating policy.

The law requires the stockholders to vote on such questions as changes in capital, name, or location. Their duties may be summarized as follows: (1) to contribute the original capital and to pay assessments; (2) to control the institution directly through voting on certain questions; (3) to control the institution indirectly, in respect of all other matters, through the election of directors.

The Banking Act of 1933 requires, for the first time, cumulative voting of national bank shares. This, in theory at least, will safeguard stockholders' control of the institution by giving the minority representation on the board of directors.

Rights of stockholders. Bank stockholders have all the rights of stockholders in business corporations, such as: (1) the right to inspect corporate books; (2) the right to change the capitalization by assessment, increase, reduction, split-up in par value, or stock dividend; (3) the right to vote by proxy; (4) the right to hold directors personally liable for malfeasance; and (5) the right to purchase new stock before it is offered to outsiders (pre-emptive rights).

Liability on bank stock. National bank stock issued before June 16, 1933, differs from ordinary stock in one respect—it carries double liability, unless terminated as described hereafter, and the holder of such stock is liable to an assessment ("for all contracts, debts, and engagements") equal to the par value of the stock held. This amount is in addition to the contribution represented by the original payment for the stock. National bank stock issued since June 16, 1933, does not carry double liability, and the Banking Act of 1935 provided that such liability on stock issued before that date might be terminated by the issuing bank as of July 1, 1937, or any date thereafter, upon six months' notice.

Before 1930, the Comptroller of the Currency drastically enforced the double liability feature of the National Bank Act. More than 50 per cent of the total of all assessments was collected by him. When the large number of past national bank failures is taken into consideration, it is apparent that stock of banks which have not terminated the double liability presents a serious financial risk. Every prospective purchaser of such bank stock should fully appreciate the possibility of an assessment and should not assume

the risk lightly, as the liability is more than theoretical. Double liability is still a statutory requirement in many states, but it applies only to state-chartered institutions.

Directors: qualifications. The authority of the stockholders is delegated and expressed through the directors. Because of the social responsibility involved in banking, directorship is a public trust as well as a position of business authority. This responsibility, legal as well as moral, is fully recognized by the public. Many directors, however, have failed, through negligence or lack of ability, to exercise the full prerogatives of their office, with the result that they have had to face heavy personal liability through suits of stockholders or depositors. The man who becomes a bank director commits himself to an important part in the management of the bank. All things considered, a man should think several times before accepting the honorable but hazardous commitment of bank director.

In an effort to assure responsible local control of banks, legal qualifications have been established for directors. Directors must in every case be citizens of the United States. In state banks, generally, a proportion of the directors, set by statute, must be residents of the state in which the institution is located. In national banks, at least three-fourths of the directors must be residents of the state in which the bank is located, or must reside within fifty miles of its head office. In addition, they must have so resided for at least one year preceding their election. These residence provisions are aimed at absentee ownership and control; in theory, at least, they prevent "foreign" control of local banking resources.

Every national bank director must own qualifying shares to the aggregate par value of at least \$1,000, except that in national banks of \$25,000 capital this minimum requirement is reduced to \$500. Each newly elected director must take oath, in the following form, that these legal qualifications have been met:

State of } ss
County of }

I, the undersigned, director of The located at, being a citizen of the United States, and resident of the state of, do solemnly swear (affirm) that I will, so far as the duty devolves on me, diligently and honestly administer the affairs of said association; and that I will not knowingly violate, or willingly permit to be violated, any of the provisions of the statutes of the United States under which this association has been organized; and that I am the owner in good faith and in my own right, of the number of shares of stock required by said statutes, subscribed by me or standing in my name on the books

of the said association; and that the same is not hypothecated or in any way pledged as security for any loan or debt.

Subscribed and sworn (affirmed) to before the undersigned this day
of , 19 .

Notary Public

(Official seal of Officer)

Directors must also have certain intellectual, economic, and social qualifications. These may be best understood by a consideration of the duties of bank directors, given in the next section.

Directors: duties. As a practical matter, the first function of directors is to bring business to the bank and to keep it there after it arrives. Because of this, the number of directors usually far exceeds the legal minimum of five. In the merger days of 1928-1929, directorates of fifty or more were quite common, while a few banks had close to one hundred on the "board." It was almost impossible for the members of such large boards to know one another personally. One was claimed that a certain Wall Street bank solved this problem by numbering the directors and furnishing them with passes so that they could get into the board room.

Such large boards gave rise to that unfortunate creature of modern finance, the "dummy" director. Obviously, one hundred directors could not participate in the control of the bank to the extent contemplated in the law; if they did, the board would have required several days for each meeting.

The banks soon recognized that such large boards defeated their very purpose—that is, more business—and after 1929 strenuous efforts were made to reduce the boards to reasonable proportions. This movement, so far as the national banks were concerned, was greatly accelerated by a provision of the Banking Act of 1933 limiting directorates to twenty-five members.

Another reason for reducing the number of directors in "hard" times is the honorarium paid for each meeting attended. Twenty dollars (in gold, in days of happy memory) for each director plus traveling expenses makes a large board a real luxury, especially when weekly meetings are held. Such expense was not questioned when call money ruled from 6 per cent to 10 per cent; but it is another matter when banks must rely mostly on government bonds paying low interest or on short-term Treasury bills paying nominal interest for earnings.

The second function of the directors is to direct and control the

bank. The duties involved in carrying out this function follow

(1) *Attendance at board meetings.* Directors unable to attend regularly should withdraw in favor of those willing to do their share of the work. Although regular attendance is not necessarily a strict legal requirement, directors have been held guilty of non-feasance in office in cases where they neglected to attend over a period of time. If directors fully appreciated the liabilities of their office, they would need no urging to attend all meetings—they would be there early to be certain that they did not miss anything.

(2) *Formulation and modification of policies.* It is the duty of the directors to establish conservative and yet progressive policies. These policies should be modified in accordance with developments in banking and business. The directors then see to it that their policies are carried out by the officers. Suitable reports from the officers are used to keep the directors advised concerning the situation of the bank.

(3) *Directors' examinations of the bank.* Directors are required to make periodic examinations of their bank. In a small bank this examination may be made by the entire board. Generally, however, the job is delegated to a committee of the board known as the auditing committee. Sometimes independent accountants are engaged to make the examination. In any event, this examination is the responsibility of the directors; it is a duty that must be faithfully observed if liability is to be avoided. The entire subject of directors' examinations will be treated in detail in a subsequent chapter on bank audits and examinations.

Directors: liability. While the duties of directors are not onerous, the personal liability which they incur is a very heavy one. Bank directorship is a serious commitment that no one should assume unless he is willing to pay strict attention to the job and its responsibilities. Directors must function in accordance with the statutes and legal precedents (court decisions), or personal liability will be incurred. Directors may be held criminally and financially liable for the omission or commission of any acts in which the bank is connected. The courts have uniformly insisted upon the highest standards of accountability and liability; generally speaking, both the letter and the spirit of the law have been enforced.

Specific criminal penalties have been written into the statutes covering the following acts: contributions to political parties, loans to bank examiners, wilful certification of check in excess of depositor's balance, fraud, false entry in the books, embezzlement, and

soliciting or receiving a commission or bonus for making a loan. Directors are also financially liable for any losses incurred through such acts.

In addition, directors are liable to creditors (particularly depositors) and stockholders for exceeding the statutory limits on loans, payment of dividends out of capital, failure to examine the bank as required by law, and mismanagement in general and particular. Neither ignorance nor passive negligence will absolve the director from liability for failure in his duties. Failure to attend directors' meetings is no excuse for failure of duty; a director should function or resign.

Furthermore, a long line of judicial decisions holds that directors must be *diligent*, reasonable, prudent, and possessed of business ability; they must administer the affairs of the bank fairly, intelligently, and legally, if liability is to be avoided. Under new legislation, if a director of a national bank does not measure up to these standards, he may be summarily removed from his post by the Board of Governors of the Federal Reserve System upon recommendation by the Comptroller of the Currency.

The directors, however, do not have to do the actual work of operating the bank. They select officers who, in turn, organize a staff of employees for the detail work of bookkeeping and credit extension. Directors usually insist that the officers and employees be bonded to protect the bank against losses from theft or fraud. So far as the directors themselves are concerned, such a bond is not necessary; if they exercise due care in selection, personal liability for the acts of employees will be avoided, as it has been held that directors are not insurers of the honesty or capacity of the staff they appoint.

Interlocking directorates. Member bank directors should seek legal advice before accepting election to the board of another *financial* institution, as the Clayton Anti-Trust Act of 1914, as amended, forbids, with certain exceptions, interlocking directorates among financial institutions. The Board of Governors of the Federal Reserve System is empowered to grant permission, in its discretion, to directors to serve on not more than two boards if the institutions are *not in substantial competition*. Restrictions apply to officers and employees, as well as to directors.

The Board of Governors was quite lenient in its interpretation of "substantial competition," and in most cases granted its permission for directors to serve on more than one bank board. On February

Dated

, 19

Monthly Report of Active Officers to Directors

1 COMPARATIVE STATEMENT OF CONDITION

RESOURCES	19	Month Ago	Year Ago	% to Deposits
Cash and due from banks				
Unpledged U S Securities				
Unpledged other bonds (Marketable)				
Demand C'm'l and Call P'p'r (Av'le)				
Sub-Total . . . \$				
1st Mortgage loans				
Other secured loans				
Other loans, discounts and bonds				
Sub-Total . . . \$				
Loans to Officers, Directors and allied interests				
Pledged loans and discounts				
Pledged bonds ..				
Sub-Total . . . \$				
Overdrafts (Itemized Attached)				
Bank's house, furniture and fixtures				
Other real estate				
Sub-Total . . . \$				
Other assets				
TOTAL RESOURCES				
LIABILITIES:				
Commercial deposits . . .				
Public fund deposits " "				
Other demand deposits				
Total demand Dep \$				
Savings deposits				
Time C/Ds				
Total time Dep. . . \$				
Total Deposits . . \$				
Bills payable and re-discounts				
Capital Stock				
Surplus Fund				
Undivided Profits				
Reserve Account				
Sub-Total \$				
Other Liabilities				
TOTAL LIABILITIES				

THIS SPACE FOR YOUR SIGNATURE

2. RESERVE:
Amount of Reserve on hand . . \$
Reserve Required by Law . . . \$

2. EARNING CAPACITY, ETC.

	To date from last sub-off	Same period last year
Gross Earnings . . .		
Recoveries		
Total		
Salaries Paid		
Interest paid on Deposits		
Other Expenses		
Sub-Total Expenses		
Charged off		
Net profits for period		
Total		

4A. NEW LOANS GRANTED AND BONDS PURCHASED

4B. IMPORTANT LOANS PAID AND BONDS SOLD

Date	Amount	Date	Amount

MONTHLY REPORT OF ACTIVE OFFICERS TO DIRECTORS (FRONT)

5 Changes in large and important loans:

6 Applications for new loans

Applicant	Amount	Security Offered

7 Loans for attention of Board (Excess and Large Lines, Past Due (Itemized list attached), Doubtful and Slow or Frozen Loans, etc)

8. Potential Other Real Estate

9. List here important new and closed accounts, Commercial and Savings

Date	Commercial	Initial Dep.	Date	Savings	Initial Dep.

10. Miscellaneous, for attention of Board

To the Board of Directors

Respectfully submitted,

_____, Bank

_____, President,

of

_____, Cashier.

The above constitutes report of the active officers. Find below suggested order of business.

1. Call to order by President.
2. Roll Call.
3. Reading of minutes of last meeting.
4. Report of active officers as above and discussion of same.
5. Reading communications from supervising authority. Discussion and reply to same.
6. General discussion of bank's affairs and especially important changes.
7. Adjournment.

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MONTHLY REPORT OF ACTIVE OFFICERS TO DIRECTORS
(REVERSE)

1, 1940, the Board ruled that all permissions to serve on more than one bank board would expire June 1, 1940, and that no further permission would be granted.

Most economists, especially since 1929, feel that banks should be permitted, even encouraged, to present a more united front in all credit matters; but politicians seem to feel quite differently on the point. They profess to be still worried about Wall Street and the "money trust"

There is more "interlocking" between the directorates of banks and industrial enterprises than among financial institutions. The Guaranty Trust Company of New York, for instance, advertised at one time that the thirty members of its board were affiliated with 525 other companies in 79 different lines of business. If not abused, such close relations with industry strengthen a bank. Although there are inherent dangers in such tie-ups, especially if the directors are unscrupulous, such relationships have not yet been legally prohibited. The liabilities attaching to corporate directors under the Federal Securities Act of 1933 have tended to discourage interlocking directorates, in general.

Officers. Officers are elected by the board of directors upon recommendation of the president or other executive officer of the bank. Only the president, vice-president, and cashier are recognized in the National Bank Act. These officers are but the nucleus of the official family of a modern bank. In the larger banks, especially, there are, in addition, a chairman of the board, a comptroller, an auditor, a trust officer, and many vice-presidents, assistant vice-presidents, assistant trust officers, and assistant cashiers. Most of these officers are concerned with general administrative work. Some, however, such as the auditor, have direct charge of specific functions of the bank.

Departmentization. The work of the bank naturally divides itself into financial administration and operation. In a large bank, department heads (who are not officers) have direct charge of the operating departments. Usually a particular officer is given general oversight of the department, but the actual operation of it is left to the department head. In some banks, especially the smaller ones, officers, in addition to their administrative duties, direct the operation of departments.

The extent to which departmentization is feasible will, of course, depend upon the size of the bank. Proper departmentization functionalizes the work and expedites it through the consequent increase

in efficiency; on the other hand, too much departmentization increases the cost of supervision and makes the bank organization less flexible in meeting peak loads. Bank management should strive for the happy medium which will give maximum efficiency at lowest cost. The size of the bank and the extent to which it is departmentized will determine the number and kinds of officers needed; there is, therefore, no uniformity among the official staffs of different banks.

Duties of senior officers: chairman of board. In all but the largest financial institutions, "chairman of the board" is practically an honorary title. In fact, small banks usually dispense with the title entirely. In large banks, the chairman is generally an active executive ranking higher than the president, in theory at least. He is a sort of super-executive without portfolio, as ordinarily no specific duties are assigned to him. Mergers have frequently given banks a surplus of these super-executives. One Chicago bank, for instance, had for a period of time a co-chairman in addition to a chairman. A very large New York bank had several such officials, designated by the following titles: chairman of the governing council, chairman of the executive committee, chairman of the board, vice-chairman of the board, and so on.

President. The president has certain duties assigned in the National Bank Act: he must attest the more important reports to the supervisory authorities; he must sign certain instruments; in the absence of the chairman, he presides at meetings of the board of directors. His duties, in addition to those prescribed by law, will depend entirely on the president himself; the importance of the office will be determined by the type of man he himself is. He may receive a large salary for running the bank; or he may receive nothing, for doing nothing.

Vice-president. The vice-president's duties are those delegated by the president. Ordinarily, the vice-presidents are the loan officers; and, as a corollary, it is their job to get *and hold* deposits for the bank. Like the president, after having made a success in business, they are usually brought into the bank because of the accounts they command. Rarely do they reach their position through promotion within the organization. An exception to this is the practice of the larger banks of selecting officers from smaller banks in order to get the business which they bring.

From the foregoing, it may be seen that the chief qualification for the senior officers is, unfortunately, that of bringing business to

the bank. Banking ability and experience sometimes have but little to do with their selection.

Duties of junior officers: cashier. The cashier is a very important officer in most banks. While his importance may be overshadowed in larger banks, he is at least a combination of chief clerk, secretary, and treasurer. In smaller banks, he may be all of the foregoing and more—he may even be the chief executive officer of the bank. Minutes of the directors' meetings are kept by him; he signs all reports and the bank's currency; he is concerned with operations as well as with administration. All in all, the success of the medium-size bank depends more on the cashier than on any other officer.

Duties of other officers. There are many other officers, such as assistant vice-presidents, assistant cashiers, and assistant trust officers, who have definite duties, depending on the internal organization of the bank and its size. It should be understood that the duties of these officers are not indicated by their names; that is, the assistant vice-president does not necessarily aid and assist a vice-president. His duties may be entirely different, since these titles indicate rank as well as the duties involved.

As the specific work of these different officers is covered in the various chapters on operations, further discussion here is not needed.

Personnel. While the directors and officers establish the policies and aid in carrying on the activities of the bank, the real day-to-day work of the institution is done by the employees. In no other business is the quality of the working force a more important consideration. Accuracy, honesty, ability, and personality are a few of the qualities absolutely requisite in a bank employee. Scientific management at its best should govern all matters relating to personnel.

Equipment. The equipment of the bank will depend on the location, size, character of its business (large or small accounts), and the attitude of its management toward clerical labor-saving devices.

Obviously, every bank must have suitable banking quarters and a vault; but the remainder of the equipment varies widely. Thus, some banks have "monkey cages" for their tellers; others use the more modern counter without protective screens of any sort. Within the bank itself, the equipment may range from telauto-

graphs and electric tabulating machines to tear gas and machine guns.

Great business service corporations, like International Business Machines, National Cash Register, and Remington-Rand, have developed for use in banks machines which are marvels of mechanical ingenuity. A few banks have been thoroughly mechanized, but, by and large, bankers have been slow to take advantage of the great mechanical advances that have made this the day of business machines. More explicitly, the banker, in general, permits in his own organization old-fashioned methods which he would not countenance in that of a borrower. This whole subject of the use of business machines in bank work is so important, especially for the future, that the contribution of some of the principal machines used will be covered in later chapters on the operations of the various departments.

Questions for Study and Review

1. What part does the stockholder play in the bank?
2. List in the order of their importance the types of bank stock purchasers
3. Why was double liability on bank stock abolished?
4. Give the legal qualifications of bank directors.
5. Give the other-than-legal qualifications of bank directors.
6. Describe the duties of bank directors.
7. What are the liabilities of bank directors?
8. Name the senior officers of a bank; the junior officers
9. Outline the duties of the cashier.
10. To what extent have banks adopted labor-saving equipment?

Problem

- (a) On the accompanying chart, first *write* the title (rank) of the individual directly in charge of each function immediately above the name of the function;
- (b) Then, number alongside the title, in the order of their importance (1, 2, 3, etc.), the five most important line officials shown on the chart.

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R. R.

CHAPTER 8

Banking Transactions

Stockholders' investment. An analysis of typical transactions provides the easiest approach to an understanding of the commercial banking business. Each of the more important transactions will therefore be analyzed, and its effects upon the balance sheet will be shown.

The stockholders' ownership, or investment, is represented by capital stock paid in, by surplus, and by undivided profits, plus any amounts reserved for contingencies, taxes, and so forth, that are in excess of actual needs. Banks may be authorized to issue one or more classes of preferred stock as well as common stock. National banks and, in several jurisdictions, state-chartered banks and trust companies are now permitted to issue preferred stock.

In bank accounting, the surplus is classified into two accounts: (a) Surplus and (b) Undivided Profits. Current earnings are credited to the Undivided Profits account, dividends are paid out of it, and losses are charged against it. In accordance with the practice followed by other businesses, banks use various income accounts—such as Interest Received, Profit on Sale of Securities, Interest Paid—to reveal the more important sources of income and expense. The net balances in these accounts are posted to the Profit and Loss account at the end of each month or other accounting period, and the net profit or loss is carried to Undivided Profits.

Extraordinary losses may wipe out all the undivided profits and the surplus as well, and even encroach upon the capital. If the capital of a national bank is impaired, the holders of its common stock are liable for assessments to make good the impairment, provided that such assessments are levied by a vote of the stockholders.

However, the only way in which a bank can enforce such an assessment upon a stockholder is through the sale of common stock registered in his name; he is not liable for any amount in excess of the sum realized from the sale of his stock. It is extremely unusual for such assessments to be attempted. Preferred stock holders are exempted from this liability just as they are from "double liability," as was noted in the last chapter. Failure to restore impaired capital, by assessment or otherwise, results in liquidation of the bank.

If undivided profits accumulate to an amount considerably larger than will be needed to cover expected dividend payments plus any anticipated losses for which no other provision has been made, the directors may transfer a part of the Undivided Profits account to Surplus. Directors of national banks are authorized by law to declare dividends semi-annually; but, before a dividend on common stock can be declared, not less than 10 per cent of the net profits of the preceding half year must be carried to Surplus until the surplus shall equal the amount of the common capital stock. The cumulative preferred dividend of not more than 6 per cent per annum, to which preferred stock holders in national banks are entitled under the law, is not subject to this restriction.

When a new bank is being organized, its common stock is usually sold at a premium above par in order to absorb organization expense and any operating loss that may be incurred during the early period of the bank's existence. In this way the bank avoids impairment of capital. Most bank managements prefer to retain part of the earnings and to build up a surplus in excess of legal requirements. Consequently, the common stock of well-established banks usually has a book value more than 20 per cent above par, and new stock issued by such banks is sold at a premium. Under the Banking Act of 1935, national banks are required to have a paid-in surplus equal to 20 per cent of capital at the time they commence business.

Assume that our new national bank issues the following: 2,000 shares of common capital stock, with a par value of \$100, at a price of \$150 per share; and 1,000 shares of preferred capital stock, at par, \$100—all shares being payable in cash at once. The balance sheet will read:

<i>Assets</i>		<i>Liabilities</i>	
Cash in Vault	\$400,000	Com. Cap. Stock Paid In . . .	\$200,000
		Pref. Cap. Stock Paid In . . .	100,000
		Surplus	100,000
	<hr/> \$400,000		<hr/> \$400,000

Changes in capital stock. As rapidly as earnings occur and as expenses and losses are incurred, entries are made in the appropriate income accounts. Consequently these accounts change continuously. When the net profit or loss is posted to Undivided Profits at the end of each accounting period—monthly, as a rule—the latter account changes.

Surplus is much more stable. It changes under the following conditions: (1) when the directors order accumulated earnings to be transferred from Undivided Profits to Surplus; (2) when it becomes necessary to charge extraordinary losses to the Surplus account; and (3) when amounts are transferred from Surplus to Undivided Profits, for distribution as dividends or for other purposes.

Changes in capital stock require the approval of Federal or state banking authorities, depending upon whether the bank operates under a Federal or a state charter. With the approval of the Comptroller of the Currency and by a vote of the stockholders owning two-thirds of the shares, a national bank may increase its authorized capital stock and sell new stock for cash or declare a stock dividend, provided that, in the case of a stock dividend, the surplus be at least 20 per cent of the total capital stock *after* the increase. When a cash dividend is paid under an agreement that the dividend is to be returned as payment for new stock, the Comptroller also enforces the 20 per cent surplus requirement, as in the case of a direct stock dividend, because the two transactions are identical in effect.

When the stock of a national bank is to be increased in connection with a consolidation, the absorbing bank may purchase, for cash, the assets of the liquidating bank—with an understanding that all or part of the cash is to be returned as payment for new stock of the absorbing bank. In such a case, stockholders of the absorbing bank, in advance of consolidation, waive their rights to subscribe to the new stock. If there is difficulty in obtaining waivers or if greater freedom in distributing the stock is desired, both of the interested banks may be liquidated. A newly organized bank then acquires the business of both banks.

With the approval of the Comptroller of the Currency and the Board of Governors, a national bank may, by a two-thirds vote of its stock, reduce its capital, provided that after reduction the capital be not less than the legal minimum for a national bank in its location, nor less than the amount of circulating notes for which it is liable. As an alternative to liquidation or assessment of stockholders, a reduction of capital stock may be required by the Comp-

troller to restore an impairment of capital; in this case no distribution is made to stockholders. Capital set free by a voluntary reduction may be returned in cash directly to the stockholders, or assets may be withdrawn from the bank and trusted for their benefit, to be distributed as realized.

Purchasing stock in a Federal Reserve bank. Every member bank in the Federal Reserve System is required, upon admission, to subscribe to the capital stock of the Federal Reserve bank of the district in which the member bank is located an amount equal to 6 per cent of its own paid-in capital and surplus. One-half of this amount must be paid at once. The remainder is subject to call by the directors of the Reserve bank. No such calls have been made thus far, and the liability on the unpaid subscription is not shown on the published statements of banks.

Holders of Federal Reserve bank stock are entitled to a cumulative dividend of 6 per cent per annum. New stock is issued at par, \$100 per share, plus one-half of one per cent for each month that has passed since the last preceding dividend payment. Since all national banks are required to be members of the Federal Reserve System, our new national bank must at once subscribe 6 per cent of its paid-in capital and surplus, or \$24,000, and pay in one-half of this amount. The effect on the balance sheet will be:

<i>Assets</i>	<i>Liabilities</i>
Stock in Federal Reserve Bank ..	+\$12,000
Cash in Vault.	- 12,000

If the aggregate of paid-in capital and surplus is later increased, the subscription to Reserve bank stock and the amount paid in must be increased by the same percentage. If the aggregate of paid-in capital and surplus is decreased, the subscription must be decreased by the same percentage, and the same percentage of stock held in the Reserve bank must be surrendered. The amount of the bank's Undivided Profits is not taken into account for this purpose. Surrendered stock is cancelled, and the member bank receives payment at par, plus one-half of one per cent for each month that has elapsed since the last dividend payment, provided that no more than the book value of the stock may be paid.

Banking quarters. A new bank should be in no hurry to tie up capital in a building of its own; rather, such a bank will usually find it advisable, if a suitable building can be found, to occupy rented quarters until it becomes well established.

No member of the Federal Reserve System, without approval of the Comptroller of the Currency (if a national bank) or the Board of Governors (if a state-chartered bank), may (1) invest in bank premises or in the stock or obligations of a corporation holding the premises of the bank, or (2) make loans to such corporation or on the security of *stock* issued by it, if the aggregate of such investments and loans will exceed the capital stock of the bank. This provision permits the continuance of such investments and loans if they were made before the enactment of the above restriction (June 16, 1933), but limits additional commitments after that date. It will be noted also that loans upon the security of bonds or other obligations issued by a corporation which holds the premises are not included in the restriction. State banking laws are generally much less severe in regard to this matter.

For example, assume that our new national bank invests \$100,000 of cash in bank premises, furniture, and fixtures. The effect upon the balance sheet will be:

<i>Assets</i>		<i>Liabilities</i>
Banking House, Fur., and Fixt....	+\$100,000	
Cash in Vault	- 100,000	

Investments. Banks are restricted as to the type of investments which they may make; Federal regulation is more severe than that of the states in this respect. Subject to these general restrictions and to certain limits upon the amount which may be invested in the obligations of a single obligor, a bank may otherwise regulate its own investments. Assume that our bank purchases \$200,000 of United States Government bonds and \$50,000 of bonds of other types at par. The effect on the balance sheet will be:

<i>Assets</i>		<i>Liabilities</i>
U. S. Govt. Securities Owned.....	+\$200,000	
Other Bonds Owned	+ 50,000	
Cash in Vault.....	- 250,000	

Securities purchased are listed among the assets at the purchase price. If the purchase price is above par, the premium paid must be amortized over the life of the security, or over a shorter period. If the market value of a security declines while it is held, the bank may, under certain circumstances, be required to write down the asset. When the market price rises above the purchase price, some banks write up the value of the investment and thus show a profit;

but conservative accounting practice does not ordinarily permit a rise in the market price of an investment to be reflected in the books of account until the security is sold and the profit actually realized.

Deposits. Banks receive deposits from various sources, in various forms, and under different terms. Depositors are usually divided into at least three general classes: United States Government, other banks, all other depositors. Banks receiving deposits from the United States Government are required to furnish satisfactory security by depositing obligations of the United States or other acceptable securities. Similar requirements are usually imposed in connection with deposits made by states or their political subdivisions.

Among the various forms in which deposits may come to a bank are: money, checks on local and out-of-town banks, items for collection from banks and others, proceeds of loans and discounts left on deposit. The three main types of deposits, classified as to time of possible withdrawal, are: demand deposits, time deposits, and savings deposits.

The ways in which the bank's statement is affected by the receipt of such deposits are illustrated by the following transactions:

(1) Received, on deposit from the United States Treasury, \$20,000 in the form of a credit on the books of the Federal Reserve bank. Results:

<i>Assets</i>		<i>Liabilities</i>	
Due from F. R. Bank . . .	+\$20,000	United States Deposits . . .	+\$20,000

The deposit of Government bonds or other securities to cover these deposits is not shown in the balance sheet, for the bank retains title to securities thus pledged and the amount remains in the investment account from which the securities are taken.

(2) Received, on deposit from various customers, \$600,000 in money, divided equally between demand and time deposits. In the first instance, the \$600,000 will be debited to Cash in Vault, and distributed as credits to the various customers' accounts. The individual customers' accounts are posted to the controlling accounts, Demand Deposits, and Time Deposits. The effect on the balance sheet will be:

<i>Assets</i>		<i>Liabilities</i>	
Cash in Vault	+\$600,000	Demand Deposits	+\$300,000
		Time Deposits	+ 300,000

(3) Received, on deposit from customers, \$100,000 in the form of checks on other local banks, divided equally between demand and time deposits. After the various customers' accounts have been posted to the controlling accounts, the balance sheet will be affected as follows (it is assumed that all but \$10,000 of these checks will be collected through the local clearing house):

<i>Assets</i>		<i>Liabilities</i>	
Exchanges for Clearing House	+\$90,000	Demand Deposits	+\$50,000
Checks on Other Local Banks	+ 10,000	Time Deposits	+ 50,000

(4) Received, on deposit from customers, \$100,000 in the form of checks on out-of-town banks, divided equally between demand and time deposits. Checks drawn on members of the Federal Reserve System or on non-member banks which have agreed to remit at par to Federal Reserve banks may be forwarded for collection through the Federal Reserve bank. Other checks must be collected either through the agency of correspondent banks or otherwise. If it is assumed that 80 per cent of the amount will be forwarded through the Reserve bank, the balance sheet will be affected as follows:

<i>Assets</i>		<i>Liabilities</i>	
Items with F. R. Bank in Process of Collection	+\$80,000	Demand Deposits	+\$50,000
Outside Checks	+ 20,000	Time Deposits	+ 50,000

(5) Received, for collection from correspondent banks, \$50,000 in the form of checks on other local banks. These checks are collected immediately, and the proceeds left on deposit by the correspondents. Results:

<i>Assets</i>		<i>Liabilities</i>	
Cash in Vault	+\$50,000	Due to Banks	+ \$50,000

(6) Assume that \$10,000 in outside checks forwarded for collection through correspondents is collected, and the proceeds are left on deposit with the correspondents. Results:

<i>Assets</i>		<i>Liabilities</i>	
Outside Checks	-\$10,000		
Due from Banks	+ 10,000		

After all of the foregoing transactions have been recorded, the balance sheet will read:

BANKING TRANSACTIONS

<i>Assets</i>		<i>Liabilities</i>	
U. S Govt Securities Owned	\$200,000	Com Cap Stock Paid In	\$200,000
Other Bonds, Stocks, etc., Owned	62,000	Prof Cap Stock Paid In	100,000
Banking House, Fur, and Fixt	100,000	Surplus	100,000
Due from F R Bank	20,000	Due to Banks	50,000
Items with F R Bank in Process of Collection	80,000	Demand Deposits	400,000
Cash in Vault	688,000	Time Deposits	400,000
Due from Banks	10,000	United States Deposits	20,000
Exchanges for Clearing House	90,000		
Checks on Local Banks	10,000		
Outside Checks	10,000		
	<hr/>		<hr/>
	\$1,270,000		\$1,270,000

Legal reserve requirement. Every member bank in the Federal Reserve System is required by law to maintain a minimum percentage of reserve against its deposit liabilities, and this reserve must consist of a deposit with the Federal Reserve bank of the district in which the member bank is located. All member banks must maintain a reserve of 3 to 6 per cent against time deposits.¹

For the purpose of determining reserves to be maintained against demand deposits, member banks are divided into three classes: (1) banks located in the two central Reserve cities, New York and Chicago, must carry 13 to 26 per cent in reserves against their net demand deposits; (2) banks in 63 cities, designated as "Reserve cities," 10 to 20 per cent; (3) all other member banks, usually referred to as "country banks," 7 to 14 per cent.² Banks located in a suburban section or outside the central business and financial district of a Reserve or central Reserve city may be permitted by the Board of Governors of the Federal Reserve System to step down to the next lower bracket of reserve requirements. For example, Brooklyn and the Bronx and certain outlying sections of Chicago are included among the 63 Reserve cities. The classification of Reserve and central Reserve cities is subject to change by the Board of Governors.

The reserve required of our new national bank is calculated below on the assumption that the bank is located in a Reserve city on June 1, 1946. Some of the items are left unrecorded because they have not yet appeared on the balance sheet.

¹The Board of Governors of the Federal Reserve System is empowered by the Banking Act of 1935 to vary the reserve requirements between the limits indicated. The act of July 7, 1942, permits variations by classes of banks.

²See footnote 1.

BANKING TRANSACTIONS

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A GROSS DEMAND DEPOSITS ³ (including demand balances of other banks)		\$450,000
1. Deposits of individuals, partnerships, and corporations	\$400,000	
2 United States Government deposits ³	\$	
3 State, county, and municipal deposits	\$	
4 Deposits of other banks in the United States (except private banks and American branches of foreign banks)	\$ 50,000	
5. Deposits of private banks and American branches of foreign banks.	\$	
6 Deposits of banks in foreign countries (including balances of foreign branches of other American banks but excluding amounts due to own foreign branches)	\$	
7. Certified and officers' checks, letters of credit and travelers' checks sold for cash, and amounts due to Federal Reserve bank (transit account)	\$	
B. DEDUCTIONS ALLOWED IN COMPUTING RESERVES:		\$200,000
1 Balances subject to immediate withdrawal due from other banks, including cash items forwarded to a correspondent bank for collection and credit and charged to item "Due from Banks" (except balances due from Federal Reserve banks, from foreign banks or branches thereof, from foreign branches of domestic banks, or from private banks)	\$ 10,000	
2. Cash items in process of collection, except to the extent included in item 13-1 (including checks with Federal Reserve banks in process of collection and checks on hand which will be presented for payment or forwarded for collection on the following business day)	\$190,000	
C. NET DEMAND DEPOSITS (item A minus item B)		\$250,000
D. TIME DEPOSITS ⁴		\$400,000
1. Deposits (except savings deposits), of individuals, partnerships, and corporations.		
(a) Certificates of deposit (other than for money borrowed)	\$.	
(b) Open accounts	\$400,000	
(c) Christmas savings and similar accounts	\$.	
2. Deposits evidenced by savings pass books	\$	
3. Postal savings deposits	\$.	
4. State, county, and municipal deposits	\$.	
5. Deposits of other banks in the United States (except private banks and American branches of foreign banks).	\$.	
6. Deposits of private banks and American branches of foreign banks.	\$.	
7. Deposits of banks in foreign countries (including balances of foreign branches of other American banks but excluding amounts due to own foreign branches)	\$.	

³ As defined in Regulation D of the Board of Governors of the Federal Reserve System. By the Act of April 13, 1943, U. S. Gov't., deposits arising from subscriptions for U. S. Gov't. securities by or through a member bank were exempted from reserve requirements until six months after cessation of hostilities.

⁴ See footnote 3.

E. RESERVE REQUIRED:

1 On net demand deposits (item C above), 20 per cent	\$ 50,000
2. On time deposits (item D above), 6 per cent.	\$ 24,000
<hr/>	
3 Total reserve to be maintained with Federal Reserve bank (item E-1 plus item E-2)..	\$ 74,000
<hr/> <hr/>	

Since our new bank already has \$20,000 on deposit with the Federal Reserve bank, out of the total of \$74,000 required, it must place an additional \$54,000 on deposit there. Assume that cash is taken from the vault for this purpose. The effect on the balance sheet will be:

<i>Assets</i>		<i>Liabilities</i>
Reserve with F R Bank	+\$54,000	
Cash in Vault	... . - 54,000	

The account previously called "Due from Federal Reserve Bank" has been changed to the more usual caption "Reserve with Federal Reserve Bank." It will be noted that Cash in Vault has been reduced to \$634,000.

A central Reserve city bank or Reserve city bank must compute its reserve requirement once each week, on the basis of average daily deposits. Country banks compute their reserve requirement twice each month, on an average daily basis.

Penalty for deficiency in reserve. If a member bank fails to maintain the required reserved balance, a penalty is assessed against the bank on the basis of the average daily deficiency during each computation period ending during the month in which the deficiency occurs. This penalty is assessed at the rate of 2 per cent per annum above the Reserve bank discount rate on ninety-day commercial paper in effect at the beginning of the month. Thus, if the average daily deficiency is \$10,000 and the discount rate is 4 per cent, the penalty will be assessed at the annual rate of 6 per cent on \$10,000, or will be \$50 for the month.

If the deficiency continues, a progressive penalty may be imposed. A continuous deficiency during six or more consecutive months may result in the forfeiture of the charter (in the case of a national bank), or in expulsion from the Federal Reserve System (in the case of a state-chartered member bank).

Loans and discounts. It is necessary to differentiate between loans and discounts. In the case of a loan, the borrower receives the entire principal and, at maturity, repays the principal plus

interest for the period (unless previous interest payments have been made from month to month). In the case of a discount, the borrower receives the principal less discount for the period and, at maturity, repays the principal.

To illustrate, assume that several customers borrow in the aggregate \$1,000,000 for 120 days at 6 per cent. If the transactions take the form of loans, the borrowers will receive \$1,000,000, and will repay \$1,020,000; if the transactions take the form of discounts, the borrowers will receive \$980,000, and will repay \$1,000,000. In either case, the charge for interest or for discount is \$20,000; under the loan, the borrowers secure the use of \$1,000,000, and under the discount arrangement, the use of \$980,000.

The proceeds of loans and discounts are ordinarily credited to the borrowers' deposit accounts; and deposits thus derived are referred to as "derivative," or "secondary," deposits, to distinguish them from "primary" deposits, such as cash, checks, and so forth. If the proceeds are left with the bank as demand deposits, the immediate effect of the loans on the balance sheet will be:

<i>Assets</i>		<i>Liabilities</i>	
Loans and Discounts . .	+\$1,000,000	Demand Deposits . .	+\$1,000,000

Now assume that the same amount of discounts is made, with the proceeds left as demand deposits. The effect on the balance sheet will be:

<i>Assets</i>		<i>Liabilities</i>	
Loans and Discounts. .	+\$1,000,000	Demand Deposits . .	+\$980,000
		Unearned Discount . . .	+ 20,000

Obviously no discount will be earned except as it accrues during the life of the loan. The Unearned Discount account is in the nature of a valuation reserve to correct the overstatement of the value of the loan-and-discount asset.

Customers usually do not borrow until just before they need to use the funds, and there is likely to be an immediate withdrawal of at least part of the deposits established by the above loans and discounts. Banks in the United States generally expect a borrower to maintain a "compensating" deposit balance, equal to from 10 to 20 per cent of the line of credit extended, but the average actually obtained probably ranges nearer 10 than 20 per cent. This in effect makes the real cost of borrowing to the customer higher than the nominal rate.

Assume that one-half of these derived deposits are withdrawn at once by check, and that 10 per cent of the amount of checks drawn is paid to other customers of the bank and thus finds its way back to the bank as redeposits. One-half of the \$1,980,000 of derived deposits (\$990,000) will thus be checked out, and of this amount 10 per cent (\$99,000) will be redeposited; the bank will lose \$891,000 of its vault cash and a like amount of demand deposits. The effect on the balance sheet will be:

<i>Assets</i>		<i>Liabilities</i>	
Cash in Vault	—\$891,000	Demand Deposits	—\$891,000

Since the bank has only \$634,000 cash in the vault, the bank is \$257,000 short of having enough to meet this withdrawal of \$891,000. Furthermore, the demand deposits are now increased by a net of \$1,089,000 (\$1,980,000-\$891,000); hence, \$217,800 (20% of \$1,089,000) is added to the bank's reserve requirement. Since the bank has no excess balance in the Reserve bank, the total deficiency in reserves and vault cash is therefore \$474,800 (\$217,800 + \$257,000).

In addition, the bank does not dare to strip itself entirely of till money. With demand deposits now nearing \$1,500,000, the bank will need from \$15,000 to \$75,000 in the till, depending upon the nature of its business and the time required to replenish its cash by drawing on the Reserve bank. Assume that \$500,000 will cover reserve and till requirements, and will put the bank in a comfortable position for the time being.

Borrowing from a Federal Reserve bank. To obtain the needed \$500,000 in cash, the bank must either liquidate some of its assets or borrow. It could sell some of its bonds or borrow from some other bank. The Federal Reserve bank may be willing to discount some of the customers' notes of the bank, or to lend on the security of these notes or of the Government bonds owned. Assume that \$500,000 is borrowed at the Reserve bank on the security of a like amount of customers' notes, with \$220,000 left on deposit there and the remainder withdrawn in cash. The results will be:

<i>Assets</i>		<i>Liabilities</i>	
Reserve with F. R. Bank...	+\$220,000	Bills Payable and Redis-	
Cash in Vault	+ 280,000	counts.....	+\$500,000

The above transaction gives rise to a "bill payable"; the bank retains title to its customers' notes which are pledged to secure its

own note. When customers' notes are rediscounted, the bank indorses them to the Reserve bank. Its indorsement is a liability. The rediscounted notes are still shown as an asset, since the bank would regain title to them if it should be called upon to make good its indorsement. A bank may, of course, borrow or rediscount at other banks as well as at the Reserve bank.

Prepayment of loans and discounts. Now assume that a \$50,000 loan is prepaid by check on the bank after the note has run thirty days. During this time \$250 in interest will have accrued on the loan. This amount will be credited to Interest and Discount Received, and later will find its way into Undivided Profits. Results:

<i>Assets</i>		<i>Liabilities</i>	
Loans and Discounts	—\$50,000	Demand Deposits.	—\$50,250
		Undivided Profits.	+ 250

In case of prepayment, a bank usually will not rebate all of the interest or discount which the borrower has contracted to pay, on the ground that at least a part of the discount for the full period is required to cover expenses in investigating the credit risk, and so on.

To show the effect of this practice in connection with a prepaid discount, assume (1) that a \$50,000 loan among those described above is prepaid by check on the bank at the end of thirty days, while the note still has 90 days to run; and (2) that the rebate for the 90-day period is at the rate of 3 per cent per annum. Discount for the full 120-day period (\$1,000) has already been taken into the books as a credit to Unearned Discount. Of this amount \$375 is rebated and will reduce to \$49,625 the check that must be drawn to prepay the note. The remaining \$625 will be earned, and will at first be taken out of the Unearned Discount account and credited to Interest and Discount Received. From there it will find its way into Undivided Profits by way of the Profit and Loss account. Results:

<i>Assets</i>		<i>Liabilities</i>	
Loans and Discounts.	—\$50,000	Undivided Profits.	+\$ 625
		Unearned Discount.	— 1,000
		Demand Deposits.	— 49,625

Certifying checks. In many transactions, such as the purchase and sale of securities, where the drawer's plain check is not acceptable or where it is not convenient or desirable to cash the check immediately, that check is taken to the drawer's bank for "certification." The effect of certification is equivalent to the following

statement by the bank: "The drawer has this amount on deposit with us; we are taking it out of his deposit account, and will pay this check upon presentation with proper indorsement." The usual method of certifying is to place this stamp across the check:

Certified for \$
 Date
 Signature
 Certification Number.

Small banks sometimes certify through a larger correspondent bank that is the clearing house member through which they clear; such banks stamp across their checks "Certified payable through the Blank National Bank."

A check may be presented for certification by either the drawer or the payee. In either case, the certifying bank assumes the obligation to pay the check; but, when a check is certified at the request of the payee, the drawer is released from further liability on it, on the ground that the payee could have cashed the check as easily as he had it certified and that, if the bank later fails before the check is paid, the drawer should not suffer from the payee's delay in cashing it.

Since a bank is under no obligation to certify for a depositor—but only to pay—some banks prefer to issue officers' checks to depositors who request certification. Members of the Federal Reserve System are forbidden by law to certify for an amount in excess of the drawer's deposit balance. The bank must maintain the same percentage of reserve against certified and officers' checks outstanding as against demand deposits.

Assume that checks for \$50,000 are certified. The amounts are charged to the accounts of the various depositors, and credited to the Certified Checks account. The effects on the balance sheet are:

Assets

Liabilities

Demand Deposits.	-\$50,000
Certified Checks.	+ 50,000

Overdrafts. Banks in some countries frequently use pre-arranged overdrafts as a method of making advances, but in the United States such overdrafts are not approved. When a bank honors a check that is written in excess of the depositor's balance, that bank is, in effect, making a loan. The depositor may or may

not be required to deposit collateral security for the overdraft and to pay interest on the amount. Chronic overdrawers are likely to be requested to withdraw their accounts. On the bank's books, the overdraft is treated as a loan.

Assume that overdrafts for \$10,000 are cashed. The amount is debited to the Overdrafts account, and credited to the various depositors just as though a loan were being made. At the same time, Cash is credited, and the various depositors are charged with the amounts of their respective checks. Results:

<i>Assets</i>		<i>Liabilities</i>	
Overdrafts....	+\$10,000	Demand Deposits.	+\$10,000
Cash	- 10,000	Demand Deposits	- 10,000

Officers' checks. Any check drawn by a bank is signed by the cashier or by some other officer authorized to sign such instruments. By the issuance of an officer's check, the bank assumes an obligation similar to that involved in the certification of a depositor's check, or in the acceptance of a demand deposit.

Assume that \$100,000 of municipal bonds are bought at par and paid for with an officer's check. Results:

<i>Assets</i>		<i>Liabilities</i>	
Other Bonds, Stocks, etc.,		Officers' Checks Outstanding	+\$100,000
Owned.. . . .	+\$100,000		

Acceptances. The use of an acceptance may be illustrated by a transaction involving an importation of merchandise. Assume that Smith in New York arranges to buy \$10,000 worth of hides from Gonzales in Buenos Aires, and that payment is to be made, in dollars, sixty days after sight. However good Smith's credit may be at home, he may not be known to Gonzales, and therefore it may be necessary for a bank credit to be substituted for Smith's credit. Accordingly Smith comes to our bank to make arrangements. He explains the nature of the transaction, and requests the bank to permit Gonzales to draw on that bank for the amount involved. This request constitutes the "application for a commercial letter of credit."

If the bank approves the application, Smith next signs an "acceptance agreement," in which he promises to pay the \$10,000 to the bank before it is called upon to honor any drafts drawn against

it under the arrangement. He may or may not be required to deposit collateral security. The bank now draws up a "commercial letter of credit," addressed to Gonzales; the letter authorizes him to draw on the bank, for Smith's account, up to an aggregate of \$10,000, at sixty days' sight, against the shipment of hides from Buenos Aires to New York. The bank stipulates that the shipment must be insured, and that the bill of lading shall be made out to the order of the bank; it also gives instruction as to the various documents which are to accompany the bill of lading and any draft, or drafts, drawn under authority of the letter.

Through this transaction the bank has assumed a definite liability, and its balance sheet is affected as follows:

<i>Assets</i>	<i>Liabilities</i>
Customers' Liability a/c Acceptances and Letters of Credit Outstanding	Letters of Credit Outstanding
+\$10,000	+\$10,000

The letter of credit is now mailed to Gonzales. If all is satisfactory, he ships the hides; and, in accordance with instructions contained in the letter, he obtains the insurance papers, consular invoice, and bill of lading, and draws a draft to cover the amount of the shipment. Suppose that only one-half of the hides are included in the first shipment. He now draws a draft on our bank for \$5,000, payable sixty days after sight; attaches the consular invoice, bill of lading, and so forth, to the draft; and discounts the draft at his local bank. The amount and date of the draft are noted on the back of the letter of credit.

The draft is promptly forwarded by Gonzales' bank to its correspondent in New York, which in turn presents the draft, with the shipping documents, as soon as it is received, to our bank. If all is satisfactory, our bank acknowledges the draft and agrees to pay it at the end of sixty days (sixty days after sight). This transaction is completed in the following way: our bank "accepts" the draft—that is, it stamps across the face of the draft the word "accepted," the date, and the bank's signature. This transaction converts a part of the letter of credit into an acceptance, and leaves the remainder of the letter outstanding. The acceptance is equivalent to a promissory note signed by the bank. Results:

<i>Assets</i>	<i>Liabilities</i>
	Letters of Credit Outstanding —\$5,000
	Acceptances Outstanding + 5,000

In the case of an exportation from Smith to Gonzales, the transaction is reversed. If payment is to be made in dollars at New York, it is necessary for Gonzales, directly or indirectly (through his bank), to obtain a letter of credit, from a New York bank, addressed to Smith and authorizing him to draw on that bank against shipment of the merchandise.

If Smith trusts Gonzales and wishes to finance the exportation himself without borrowing from his bank, he may obtain from his bank a letter of credit addressed to himself and authorizing him to draw on the bank against shipment of the merchandise. Drafts drawn under the letter may then be sold in the market to other banks or discount houses.

It will be noted that in none of the above cases has the accepting bank advanced any money. A bank frequently purchases (discounts) its own acceptances because good investments are scarce or because it wishes to support the market for its acceptances. This procedure is equivalent to making a direct loan to the applicant for the letter of credit, with the merchandise as security.

Now assume that another import of hides, such as that described above, is to be paid for in Argentine pesos. Smith requests our bank to obtain from its correspondent in Buenos Aires a letter of credit addressed to Gonzales. In making this arrangement, our bank assumes an obligation to the Buenos Aires bank in pesos equivalent to \$10,000, for our bank must pay the funds to the Buenos Aires bank before any acceptances drawn under the letter mature. Our bank takes from Smith his agreement to pay to it the amount of drafts before any remittance must be made to Argentina. Results:

<i>Assets</i>		<i>Liabilities</i>	
Customers' Liability a/c Ac- ceptances and Letters of Credit Outstanding.....	+\$10,000	Acceptances Executed by Other Banks for Our Ac- count.....	+\$10,000

Banks in various parts of the United States arrange to have their correspondent banks in New York, or in other large cities, issue letters of credit to aid the country banks' customers in the financing of export or import transactions. Bank acceptances are only infrequently employed in connection with domestic transactions.

The applicant for a letter of credit is required to pay for this service a small commission which varies with the terms of the credit and with the banks performing the service. When one bank,

at the request of a customer, arranges for a letter of credit to be issued by a correspondent bank, the first bank must pay a commission to its correspondent. This charge is naturally passed along to the customer, in addition to the first bank's own commission on the transaction. New York banks customarily charge a commission at the rate of $1\frac{1}{2}$ per cent per annum on acceptances ($\frac{1}{8}$ of one per cent for sight or 30-day commercial letters of credit, $\frac{1}{4}$ of one per cent for sixty days, and $\frac{3}{8}$ of one per cent for 90 days).

On each of the two \$10,000 transactions described above, the commission would then be one-quarter of one per cent, or \$25. If a commission, at the same rate, is paid to the Buenos Aires bank and merely passed along to the customer, that amount will be \$25. If charges against customers are debited to their deposit accounts, the results on our bank's balance sheet will be:

*Assets**Liabilities*

Undivided Profits	+ \$50
Due to Banks	+ 25
Demand Deposits	- 75

Since a bank's liability for acceptances is not subject to reserve requirement, and thus not legally limited by the amount of its excess reserve, the Federal Reserve Act limits member bank acceptances on the basis of capital and surplus, as is explained on page 355 of the text.

When a bank discounts the acceptances of other banks, it acquires an asset. Assume that our bank discounts at the rate of 3 per cent per annum \$200,000 of such acceptances, having ninety days to run, and pays with an officer's check. The results will be:

*Assets**Liabilities*

Loans and Discounts	+ \$200,000	Officers' Checks Outstanding	+ \$198,500
		Unearned Discount	+ 1,500

Now assume that our bank, after indorsing these acceptances, immediately sells or rediscounts for cash \$100,000 of them at a rate of 2 per cent per annum. The bank makes a profit at the rate of one per cent per annum, and assumes a contingent liability on the acceptances sold. The results will be:

*Assets**Liabilities*

Loans and Discounts	- \$100,000	Undivided Profits	+ \$250
Cash in Vault	+ 99,500	Unearned Discount	- 750

The bank's contingent liability on acceptances sold with its indorsement is now shown as a footnote. Formerly, it was included in the balance sheet with contra items under both assets and liabilities.

Repurchase agreements. For various reasons, a bank may sell securities with an agreement to repurchase them at the same price or at some other price. For example, this might be done to convert securities into cash temporarily, for "window dressing," at statement dates. The practice might be employed also to camouflage a borrowing from another bank or elsewhere, with the securities pledged as collateral, for the effect is the same.

Assume that our bank sells \$50,000 of bonds at the purchase price, par, with an agreement to repurchase them at the same price. The results will be:

<i>Assets</i>		<i>Liabilities</i>	
Other Bonds, Stocks, etc.,		Agreements to Repurchase	
Owned . . .	-\$50,000	Securities Sold . . .	+\$50,000
Cash in Vault	+ 50,000		
Securities Sold with Repurchase Agreements.. . . .	+ 50,000		

Securities sold under repurchase agreements are an asset, since the bank will acquire title to them when the repurchase agreement is carried out. Securities thus sold may not even be segregated from other bonds, stocks, and so forth, owned.

A purchase of securities or other assets under a resale agreement has the opposite effect. It camouflages a loan made to another bank, or elsewhere, on the pledge of the securities, and temporarily decreases cash (or increases deposits), and increases the amount of securities owned.

Because of abuses in connection with repurchase agreements, the Comptroller of the Currency has issued a restrictive ruling, applying to all member banks in the Federal Reserve System, which permits the bank to enter into repurchase or resale agreements only when it has the *sole* right or option under the agreement.

Securities borrowed. Securities may be borrowed for various reasons. For example, it may become necessary for the bank to deposit a certain type of securities as collateral to cover a temporary deposit of funds by the United States, or by some state or municipality. Under these circumstances the bank may find it advantageous to borrow the securities rather than to purchase them.

Assume that our bank borrows \$100,000 of United States Government bonds. Results:

<i>Assets</i>		<i>Liabilities</i>	
U. S. Govt Securities		U. S Govt. Securities	
Borrowed	+\$100,000	Borrowed	+\$100,000

The borrowed bonds are an asset, balanced by the liability to return them.

Questions for Study and Review

1. Why is common stock issued by a new national bank offered at a price above par?
2. Distinguish between the Surplus and the Undivided Profits accounts in a bank statement
3. How is the amount of a member bank's subscription to Federal Reserve bank stock determined?
4. Assume that a bank issues \$105,000 in officers' checks as payment for United States bonds having a face value of \$100,000. How will this transaction affect the bank's balance sheet?
5. Name three types of deposits in each of the following classifications: (a) classified according to source of deposit; (b) classified according to nature of funds deposited; (c) classified according to time of withdrawal.
6. Assuming the same nominal rate in either case, is a straight loan more or less advantageous than a discount from the borrower's viewpoint?
7. How is the member bank's balance sheet affected by the following transaction: the bank rediscounts \$100,000 of customers' notes with its Federal Reserve bank? (Ignore amount of discount)
8. Does the certifying of a depositor's check increase or decrease the bank's required reserve?
9. Outline a transaction showing how a bank acceptance may be used in financing domestic trade.

Problems

1. A bank with \$100,000 capital, \$100,000 surplus, and \$50,000 undivided profits enters the Federal Reserve System 10 months after the Federal Reserve bank paid its last dividend. How would the new member bank's balance sheet be affected?
2. Based on the balance sheet shown on page 196 and assuming that the bank is located in Chicago, use the standard form and calculate: (1) the amount of legal reserve currently required; and (2) the excess of, or deficiency in, reserve. (Refer to Federal Reserve Bulletin for current rate of reserve requirement.)
3. Assume a primary demand deposit of \$100,000 and a derivative demand deposit of the same amount. (a) Show how each will affect the balance sheet of the depository bank; (b) calculate the amount by which each transaction will strengthen or weaken the reserve position of the bank, assuming that a 20 per cent reserve is required against demand deposits.

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- M. B. F.

CHAPTER 9

Banking Transactions (Continued)

Correspondent relations with Federal Reserve bank. When our bank forwards to the Federal Reserve bank, for collection, checks and other cash items, it receives immediate credit for items drawn on the Treasury and on banks in the city where the Federal Reserve bank is located, because such items can be collected at once. The amount is credited to our bank's reserve account and counted as part of its legal reserve; it can be checked against if desired.

Other checks are credited in accordance with the various "deferred availability schedules" which are issued by the twelve Federal Reserve banks. Thus, the member bank knows just when each item deposited for collection will become available as legal reserve or for withdrawal. Prior to September 1, 1939, the time schedules were based, in principle, upon the time actually required for collection; but since that date, the maximum delay has been three days, regardless of the time actually required. Some items are credited in one or two days.

Now assume: (1) that \$50,000 of the items sent to the Reserve bank, for collection, has reached the availability date; and (2) that an additional \$60,000 of out-of-town checks is received on demand deposit and forwarded for collection through the same channel. Results:

<i>Assets</i>	<i>Liabilities</i>
Reserve with F. R. Bank... (1) + \$50,000	Demand Deposits..... (2) + \$60,000
Items with F. R. Bank, in Process of Collection... (1) - 50,000	
... (2) + 60,000	

When checks and drafts on our bank are presented by the Reserve bank for payment, by mail or otherwise, any one of several methods of payment may be used. The procedure depends upon what arrangement has been made with the Reserve bank. For example, checks or drafts on other banks may be remitted by our bank, or the amount may simply be charged against our bank's Reserve account on the books of the Reserve bank. Assume that checks amounting to \$50,000 are presented by the Reserve bank and charged against our bank's Reserve account. The results follow:

<i>Assets</i>	<i>Liabilities</i>
Reserve with F R Bank ... - \$50,000	Demand Deposits - \$50,000

Assume that our bank is located at a distance from the Federal Reserve bank, and receives from the latter a draft for \$10,000 to be collected on a local business concern. The item is kept on memorandum until the draft is actually collected, and then our bank remits a check drawn on its Reserve account in the Reserve bank. One or more days will elapse before the check reaches the Reserve bank and is charged against our bank's account. While the check is in the mail, the custom is not to deduct the amount from the reserve balance, but to treat it as a deferred credit to the Reserve bank. After collection, the results will be as follows:

<i>Assets</i>	<i>Liabilities</i>
Cash..... .. + \$10,000	Due to F. R. Bank, Deferred Credit + \$10,000

Later the amount will be credited to the reserve with the Federal Reserve bank, and debited to the account called "Due to Federal Reserve bank, Deferred Credit."

Accruals. A bank must take account of accrued income and expense if it wishes to know its true condition at any given time. Suppose that an analysis of the earning assets of our bank at the end of the first month of operation shows the following:

	<i>Accrued Interest and Discount</i>
\$2,000,000, loans and discounts at 6% held 24 days.....	\$8,000
\$100,000, acceptances at 3% held 15 days	125
\$200,000, U. S. Govt. securities at 3% held 15 days.....	250
\$200,000, other bonds at 4% held 9 days.....	200
	<hr/> \$8,575

Now suppose that an analysis of expenses shows the following:

Salaries and wages (weekly pay roll) accrued 3 days . . .	\$200
\$400,000, time deposits at 2% held 18 days (average)	400
\$500,000, bills payable at 2% outstanding 18 days . . .	500
Taxes and other expenses accrued	465
	<hr/>
	\$1,565

If our bank ignores the above accruals in its statement of condition at the end of the first month, it will understate both earnings and expenses applicable to the current period, and will consequently overstate both in some future period or periods when the income is actually received and expenses are actually paid.

Accounting practice in respect to accruals differs widely among banks. One bank may ignore accruals altogether; it succeeds, at a small saving in accounting expense, in deluding itself about its true condition at all times. Another bank may accrue all principal items of income and expense daily; its management is continuously aware of its true condition, but the expense and trouble of recording this are hardly warranted in the average bank, although, if the accounting system is properly organized for the purpose, the cost is much lower than is generally supposed. Perhaps the most practical plan for the average bank is to note accruals at the end of each month.

Assume that our bank notes accruals at the end of the month. Loans of \$1,000,000 at 6 per cent have run twenty-four days. The accrued interest is \$4,000. The accrual will affect the balance sheet as follows:

<i>Assets</i>		<i>Liabilities</i>	
Accrued Interest	+\$4,000	Undivided Profits	+\$4,000

Discounts of \$1,000,000 at 6 per cent have also run twenty-four days, and \$4,000 of discount has accrued. Also, \$100,000 of acceptances at 3 per cent has run fifteen days, with accrued discount of \$125. These discounts have already been credited to Unearned Discount. The accruals must now be taken out of that account, and will find their way through the Profit and Loss account to Undivided Profits. Results:

<i>Assets</i>		<i>Liabilities</i>	
		Undivided Profits	+\$4,125
		Unearned Discount	- 4,125

Some banks, at the time a note or acceptance is discounted, credit the discount for the entire life of the obligation directly to the discount account, from which the amount will find its way into Profit and Loss and finally into Undivided Profits. Thus the earnings for the period will be overstated if no notice is taken of the fact that part of the discount is unearned. To correct this, the bank at statement date calculates the discount on each discounted obligation for the period it *has yet to run*, and deducts the amount from the earnings shown on the books.

Interest accrued on investments since the last payment date is treated in the same way as interest accrued on loans. The accrual of the \$450 on United States and other bonds will result as follows:

<i>Assets</i>		<i>Liabilities</i>	
Accrued Interest.	... .. +\$450	Undivided Profits.	. .. +\$450

The accrual of the various expense items will affect the balance sheet thus:

<i>Assets</i>	<i>Liabilities</i>
	Undivided Profits. . . . - \$1,565
	Reserve for Taxes, Interest, etc., Accrued + \$1,565

Because of the care that must be exercised in accounting for payments received on loans on which interest has been accrued, an illustration will be given. Assume that a loan of \$100,000, as described above, is paid by check six days after statement date. Since the loan ran twenty-four days during the preceding month, an accrual of \$400 has already been taken into Undivided Profits. Since, during the six days of the current period, an additional \$100 of interest has accrued, the total payment must be \$100,500. Results:

<i>Assets</i>	<i>Liabilities</i>
Loans and Discounts..... - \$100,000	Undivided Profits..... + \$ 100
Accrued Interest.. .. . - 400	Demand Deposits. - 100,500

Since the above transaction occurred after the end of the month, it is not reflected in the monthly statement of resources and liabilities (which is as follows, after the business done during the month has been taken into account):

BANKING TRANSACTIONS (CONTINUED)

<i>Assets</i>		<i>Liabilities</i>	
Loans and Discounts	\$2,000,000	Common Capital Stock Paid In	\$ 200,000
Overdrafts	10,000	Preferred Capital Stock Paid In	100,000
U S Govt Securities Owned	200,000	Surplus	100,000
Other Bonds, Stocks, etc, Owned	112,000	Undivided Profits	8,185
Customers' Liability a/c Acceptances and Letters of Credit	20,000	Reserve for Taxes, Interest, etc, Accrued.	1,565
Banking House, Fur, and Fixt.	100,000	Unearned Discount	15,625
Reserve with F. R. Bank	294,000	Due to F. R. Bank, Deferred Credit	10,000
Items with F. R. Bank in Process of Collection	90,000	Due to Banks	50,025
Cash in Vault	172,500	Certified Checks Outstanding	50,000
Due from Banks	10,000	Officers' Checks Outstanding	208,500
Exchanges for Clearing House	90,000	Demand Deposits	1,349,050
Checks on Local Banks	10,000	Time Deposits	400,000
Outside Checks	10,000	United States Deposits	20,000
U S Govt Securities Borrowed	100,000	U S Govt Securities Borrowed	100,000
Securities Sold with Repurchase Agreements	50,000	Agreements to Repurchase Securities Sold	50,000
Accrued Interest	4,450	Bills Payable and Rediscunts	500,000
		Letters of Credit Outstanding	5,000
		Acceptances Outstanding	5,000
		Acceptances Executed by Other Banks for Our Account	10,000
	<u>\$3,272,950</u>		<u>\$3,272,950</u>

Balance sheet. In the description of the transactions above, no particular attention has been paid to the amounts involved in each case, and no attempt has been made to build up a balance sheet in which the various items are in reasonable proportion to one another. The sole concern has been to explain the significance of each transaction, and to show how each transaction affects the balance sheet. The result is a balance sheet that is obviously in bad proportion.

As a matter of fact, among all the balance sheet items there is no established relationship that is normal for all banks at a given time or for any one bank at different times. Among different banks, balance sheet proportions vary, according to the nature of the banking business done; for any particular bank, these proportions vary with changes in general business conditions and with changes in the character of the business done by it. These facts are demonstrated in the "percentage" bank statements which follow on pages 166-167.

"Percentage" bank statements. In analyzing the relationships that exist among different items in a balance sheet, it is helpful to reduce the balance sheet to a percentage basis. This can be done by treating total resources or total liabilities as 100 per cent, and then by finding the percentage which each item bears to the total. By this procedure the relative importance of each item is clearly revealed. For example, if deposits are found to be 80 per cent, and investments to be 40 per cent, of total resources, the ratio of deposits to investments is readily calculated to be 2:1.

Percentage analysis has been employed in the table, shown on pages 166-167, for the purposes of comparing: (1) three classes of national banks with one another; (2) three classes of state banks and trust companies in the Federal Reserve System with one another; and (3) national banks with member state banks and trust companies. The percentages are calculated from the *aggregate* balance sheets of all member banks in each class, as reported to the Federal Reserve authorities. All member state banks and trust companies are lumped together, although a more detailed study would show that they differ in certain respects. The amounts of total assets for the various classes of banks, taken as 100 per cent, are shown at the foot of the table.

The analysis reveals the *average* condition of banks in each class on the particular date chosen, and does not necessarily depict a *typical* bank for each class. But, if any bank in a specific class should show wide variations from the average for its group at a given time, that fact would be ground for further inquiry as to causes.

Comparison of city banks with country banks. A glance at the table (see pp. 166-167) will reveal the fact that the nature of a bank's business depends more upon the location of the bank than upon the source of its charter. The commercial banking business done by a national bank in a large city is of the same general character as that done by a state bank or trust company of similar size in the same locality. The business of a country national bank resembles that of a country state bank more closely than that of a national bank located in a large city, especially if the state bank is a member of the Federal Reserve System and thus subject to the restrictions which such membership imposes. Non-member state banks and trust companies are generally less severely restricted in respect to loan and investment policies than are national banks and member state institutions, and hence many non-member or-

PERCENTAGE BANK STATEMENTS FOR NATIONAL AND STATE BANKS

<i>Assets</i>						
	<i>Percentage National Bank of Central Reserve City</i>	<i>Percentage National Bank of Reserve City</i>	<i>Percentage National Country Bank</i>	<i>Percentage State Bank of Central Reserve City</i>	<i>Percentage State Bank of Reserve City</i>	<i>Percentage State Country Bank</i>
(1)						(1)
(2)						(2)
(3)						(3)
(4)						(4)
(5)						(5)
(6)						(6)
(7)						(7)
(8)						(8)
(9)						(9)
(10)						(10)
(11)						(11)
(12)						(12)
(13)						(13)
(14)						(14)
					</	

	<i>Liabilities</i>	Percentage National Bank of Central Reserve City				Percentage National Bank of Central Reserve City				Percentage State Bank of Reserve City				Percentage State Bank of Country Bank			
		Bank of Central Reserve City	National Bank of Reserve City	Percentage National Bank of Reserve City	Percentage National Bank of Reserve City	State Bank of Central Reserve City	State Bank of Central Reserve City	State Bank of Reserve City	State Bank of Reserve City	State Bank of Country Bank	State Bank of Country Bank	State Bank of Country Bank	State Bank of Country Bank	State Bank of Country Bank	State Bank of Country Bank	State Bank of Country Bank	State Bank of Country Bank
(15)	Capital stock.....	3 663%	4.102%	6.275%	3 576%	4.869%	6 021%										(15)
(16)	Surplus.....	3.689	3 131	3 884	5 635	4 736	3.799										(16)
(17)	Undivided profits.....	1 019	1.307	1.684	1 210	1.155	1 923										(17)
(18)	Reserves.....	.502	.679	.638	.481	.692	.758										(18)
(19)	Total capital accounts	8 873%	9.219%	12 481%	10.902%	11 452%	11 901%										(19)
(20)	Demand deposits of individuals, partnerships, and corporations.....	50.636%	39 617%	35.447%	54.660%	40 232%	35 879%										(20)
(21)	Time deposits of individuals, partnerships, and corporations.....	7.020	21.487	37.766	5 149	28.633	38.274										(21)
(22)	Deposits of U. S. Govt. (including postal savings)	.829	2.500	1.210	.717	1 971	1.113										(22)
(23)	Deposits of states and political subdivisions...	4.474	7 009	8.690	1.583	4 213	8.824										(23)
(24)	Deposits of banks.....	23.288	18 613	3.229	22.585	12 161	2.927										(24)
(25)	Other deposits (certified and officers' checks, etc)	2 561	.919	.871	2 730	743	1.027										(25)
(26)	Total deposits.....	88.808%	90 145%	87 213%	87.424%	87 953%	87 544%										(26)
(27)	Bills payable and rediscounts.....	....%	.001%	.031%	....%	.. %	.029%										(27)
(28)	Acceptances executed for customers.....	.396	.167	.007	.588	.067	.024										(28)
(29)	Income collected but not yet earned .....	.068	.148	.086	.050	.124	.140										(29)
(30)	Expenses accrued and unpaid	157	.157	.102	.127	.252	191										(30)
(31)	Other liabilities	1.698	.163	.080	.909	.152	.171										(31)
	Total.....	100.000%	100.000%	100.000%	100 000%	100 000%	100 000%										
(32)	Required reserve	17.078%	9.829%	5.749%	17.115%	9.467%	6 078%										(32)
(33)	Excess reserve.....	12.931	5.003	3.633	15.659	5 409	3 623										(33)

ganizations take advantage of this fact, especially in such matters as the making of real estate loans. However, common membership in the Federal Deposit Insurance Corporation is expected to bring about somewhat greater uniformity among members of the Federal Reserve System and insured non-member banks.

A fundamental difference between city and country banks is in the character of deposit liabilities and in the percentage of reserves that must be maintained against these liabilities. Country banks have a larger percentage of time deposits, against which reserves of only 3 to 6 per cent are required of all member banks. The deposits of city banks are largely demand deposits; and not only are the reserves required against demand deposits much higher than those required against time deposits, but they are higher in the case of city banks than in the case of country banks.

It will be noted from the table (pp. 166-167) that, in the two central Reserve city banks, demand deposits were far in excess of time deposits. For these banks, the required reserve against net demand deposits at the date of the report was $22\frac{3}{4}$ per cent. Item 32 shows that the two banks were required to tie up 17.078 per cent and 17.115 per cent, respectively, of their total assets in legal reserve on the date of this report.

The two Reserve city banks also had larger net demand deposits than time deposits, but the difference was smaller, especially in the case of the state bank. For these banks, the required reserve against net demand deposits was only $17\frac{1}{2}$ per cent at the time of this report. The two banks were required to tie up 9.829 per cent and 9.467 per cent, respectively, of their total resources in legal reserve, as is shown in item 32.

Demand deposits were somewhat below time deposits in both country banks, and the reserve required against net demand deposits was only 12 per cent in the case of country member banks at the time of the report. As shown in item 32, these banks were required to tie up only 5.749 per cent and 6.078 per cent respectively, of their total resources in legal reserves.

The table (pp. 166-167) shows that all classes of banks were maintaining legal reserves considerably in excess of the amounts required. Item 5 shows the reserve held, and item 33 shows the extent to which this actual reserve exceeded the required reserve (item 32).

A part of the advantage which country banks gain over city banks—from lower-percentage reserve requirements and favorable

distribution of deposits, as between demand and time deposits—they lose through another factor. Country banks find it necessary to carry relatively larger amounts of cash in vault (item 6) than do city banks, because the former, located at a greater distance from Federal Reserve banks and branches thereof, cannot replenish till money so quickly as the latter. Cash in vault is not counted toward the legal reserve requirement.

City banks, being required to maintain larger reserves than are prescribed for country banks, have, in comparison to total resources, less funds available for other purposes. On the other hand, city banks have more opportunities to render special services at a profit. For example, it will be noted that city banks are much more active than are country banks in the creation of acceptances (items 12 and 28). This is to be expected since acceptances are used mainly in financing foreign trade, most of which originates in large cities, and since the large city banks are better known and their letters of credit and acceptances are therefore rated more highly abroad than are those of country banks.

Because of the business depression, all of the acceptance figures in the table were abnormally low for city banks, but less so for country banks, on the date of this report. The more normal comparisons of a prosperous year are shown in the table on pages 170-171 (items 5, 34, 35, and 36).

Country banks and Reserve city banks make heavier commitments in real estate (items 9, 10, 11, page 166) than do the New York and Chicago banks. A classification of loans and discounts would further emphasize this difference. Checks and other items in process of collection (item 8, page 166) naturally bulk larger in the city banks. Certified checks (included in item 25, page 167) are relatively larger in the city banks because of the use of such checks in connection with the securities and commodity exchanges. City banks receive a larger proportion of United States deposits because such deposits are distributed, in general, to those banks from or through which subscriptions to United States security issues are received. While country banks appear as the heavier borrowers (item 27) according to the report on pages 166-167, the position is reversed during a period of prosperity, as is shown by the figures on pages 170-171.

Effects of prosperity and depression on bank balance sheets. In order to reveal the effects of changing business conditions upon the banking business, percentage statements have been prepared for

PERCENTAGE COMPARISONS FOR NATIONAL BANKS DURING PROSPEROUS AND DEPRESSION YEARS

	Resources	PERCENTAGE NATIONAL BANK OF CENTRAL RESERVE CITY		PERCENTAGE NATIONAL BANK OF RESERVE CITY		PERCENTAGE NATIONAL COUNTRY BANK	
		Prosperous Year	Depression Year	Prosperous Year	Depression Year	Prosperous Year	Depression Year
(1)	Loans and discounts (including overdrafts).....	50.812%	32.649%	53.474%	33.683%	52.243%	36.367%
(2)	United States Government securities owned.....	11.280	23.056	11.926	28.301	8.824	18.881
(3)	Other bonds, stocks, securities, etc., owned. . . .	7.209	14.024	10.441	10.631	20.695	20.106
(4)	Total loans and investments	69.301%	69.739%	75.841%	72.615%	81.762%	75.354%
(5)	Customers' liability account of acceptances . .	4.365%	2.659%	1.375%	.500%	.038%	.020%
(6)	Banking house, furniture, and fixtures.	1.339	2.065	2.546	2.572	3.154	3.518
(7)	Other real estate owned . . . . .	.022	.373	.327	.555	.711	1.121
(8)	Lawful reserve with Federal Reserve bank. . .	6.832	14.034	5.199	5.064	4.047	6.451
(9)	Items with Federal Reserve bank in process of col- lection.	2.396	1.213	3.318	1.682	719	803
(10)	Cash in vault . . . . .	.480	1.154	.991	1.220	1.884	2.168
(11)	Due from banks	1.671	4.691	6.376	10.296	6.599	8.990
(12)	Exchanges for clearinghouse	10.590	3.220	2.367	981	416	258
(13)	Outside checks and other cash items. . . . .	.439	.060	.481	225	188	108
(14)	Redemption fund and due from United States Treasurer . . . . .	.030	.071	.086	.159	.182	.265
(15)	Other assets	2.555	691	1.093	1.131	.300	944
	Total	100.000%	100.000%	100.000%	100.000%	100.000%	100.000%

	PERCENTAGE NATIONAL BANK OF CENTRAL RESERVE CITY		PERCENTAGE NATIONAL BANK OF RESERVE CITY		PERCENTAGE NATIONAL COUNTRY BANK	
	Prosperous Year	Depression Year	Prosperous Year	Depression Year	Prosperous Year	Depression Year
<i>Liabilities</i>						
(16a) Common capital stock paid in.....	5 084 %	5 880 %	5 349 %	5 373 %	6 029 %	7 082 %
(16b) First preferred capital stock paid in..	0	2 330	0	745	0	.599
(16c) Second preferred capital stock paid in.	0	0	0	040	0	.023
(16) Total capital stock paid in.	5 084 %	8 210 %	5 349 %	6 158 %	6 029 %	7 691 %*
(17) Surplus.....	6 062	3 352	4 458	3 300	4 877	4 568
(18) Undivided profits.....	1 675	620	1 555	1 096	2 279	1 371
(20) Total invested funds	12 821 %	12 182 %	11 362 %	10 554 %	13 185 %	13 630 %
(21) Reserve for contingencies	336 %	.538 %	196 %	813 %	132 %	368 %
(22) Reserve for taxes, interest, etc., accrued.....	254	413	.375	219	226	160
(23) National bank notes outstanding	592	1 334	1 686	3 018	3 533	5 209
(24) Due to Federal Reserve bank	0 %	0 %	152 %	059 %	278 %	278 %
(25) Due to other banks.....	16 524	17 352	14 440	14 768	2 827	2 615
(26) Certified checks and officers' checks outstanding .	6 552	1 888	1 020	676	.511	.377
(27) Cash letters of credit and travelers' checks out- standing.....	088	072	064	032	003	001
(28) Demand deposits	40 677	46 038	38 873	35 399	36 570	33 930
(29) Time deposits.....	10 755	10 696	25 892	27 852	40 386	41 022
(30) United States deposits. . . . .	.295	5 788	.626	5 634	.268	1 596
(31) Total deposits.....	74 891 %	81 834 %	81 066 %	84 420 %	80 843 %	79 819 %
(32) Agreements to repurchase securities sold.	352 %	0 %	056 %	.037 %	036 %	.032 %
(33) Bills payable and rediscounts	3 072	0	2 819	.064	1 885	.553
(34) Acceptances of other banks, etc., sold with in- dorsement.....	2 413	057	.630	.102	.003	.002†
(35) Acceptances executed for customers	4 304	2 761	1 340	.499	031	.018
(36) Acceptances executed by other banks for our ac- count.....	240	039	095	.038	.008	.003
(37) Other liabilities.....	.695	542	.375	.236	.168	206
Total	100.000 %	100 000 %	100.000 %	100.000 %	100 000 %	100 000 %
100 per cent equals (000 omitted)	\$6,721,768	\$5,364,070	\$9,515,514	\$9,049,519	\$12,688,198	\$8,484,320

* "Capital stock," as reported to the Federal Reserve Board, differed from the sum of common, first preferred, and second preferred stock, as reported
† Now reported as a contingent liability.

the three classes of national banks. The figures are taken from the aggregate balance sheets of the banks, as reported to the Federal authorities, in a prosperous year and in a year of depression. The results are shown in the table on pages 170-171.

The first contrast to note is the sharp decrease in loans and discounts (item 1), and the even greater increase in holdings of United States securities (item 2). While other security investments (item 3) nearly doubled, in relative importance, on the statement of the central Reserve city bank, this item barely held its own with the other banks. During a depression, the demand for loans falls off and banks turn to investments for profitable employment of their funds. It is, therefore, natural to find here an increase in the relative importance of total investments as compared to loans and discounts. However, the disproportionate increase in Government securities as compared to other investments was abnormal, and was caused by a large increase in public debt just before the depression year statement was issued, the banks being called upon at that time to buy Government securities. At the time, since Government income from taxes and borrowing was in excess of current expenditures, United States deposits (item 30) were piling up in the banks.

All of the acceptance items (items 5, 34, 35, and 36) sharply declined in the central Reserve city and Reserve city banks, because of the decrease in business activity and especially in foreign trade. Acceptance items are never of great importance in country banks.

The increase in the relative importance of real estate commitments (items 6 and 7) was due partly to the fact that total resources had dropped without a corresponding liquidation, or writing-off, of the banking house, furniture, and fixtures item, but more to the fact that banks had been required to take title to other real estate which had been pledged as collateral security on defaulted loans.

The inability of banks to find satisfactory employment for funds in the depression year is attested by the great increase in legal reserve (item 8) and in cash in vault (item 10), neither of which items earns anything. This condition is also partially reflected in the increase in inter-bank balances (item 11). The depression accounts for the decrease of checks and other cash items in process of clearing and collection (items 9, 12, and 13).

The National Emergency Banking Act of March 9, 1933, authorized national banks to issue one or more classes of preferred stock, and empowered the Reconstruction Finance Corporation to buy such preferred stock issued by national banks, state banks, and

trust companies, provided such stock was exempt from double liability and from assessment to restore an impairment of capital. Where state law imposes double liability on preferred stock of state banks and trust companies, or requires unanimous consent of stockholders for issuing the stock, the Corporation was authorized to buy capital notes or debentures issued by such banks. It will be noted that, at the date of the second statement, national banks had issued a substantial amount of preferred stock (items 16b and 16c).

On June 30, 1939, national banks had about \$230 million of first preferred and \$16 million of second preferred stock outstanding. Member state banks and trust companies had about \$70 million of first preferred and \$8 million of second preferred outstanding; they also had about \$43 million of capital notes and debentures outstanding.

These authorizations were made primarily with a view to strengthening the capital structure of weak banks in both the national and state systems, although some of the strongest banks were persuaded to issue preferred stock or capital notes so that the mere issuance of such by other banks might not be taken by the public as a sure sign of weakness.

The national bank statements show that the amounts of surplus (item 17) and undivided profits (item 18) were considerably reduced by losses and/or dividend payments in excess of earnings; a similar condition existed among state institutions. In all banks, reserves for contingencies (item 21) were increased.

The increase in national bank notes outstanding (item 23) was due in part to an actual increase in amount, under more liberal provisions regarding note issue; and in part to the decrease in total resources, which increased the relative importance of the notes in circulation. As is explained in the chapter "Bank Notes and Deposits," issuance of national bank notes was discontinued in 1935.

The decline in amount of bills payable and rediscounts (item 33) was a natural result of liquidation: the banks, having collected from their borrowers, were able to reduce their own borrowings. The central Reserve city bank had succeeded in eliminating that item.

Effects of war on bank balance sheets. War always brings an expansion of credit, the extent of which depends upon the amount of government expenditures and the proportion covered by borrowing instead of current taxation. The nature of credit expansion is also affected by the financial policies that are adopted, such as borrowing from banks rather than from nonbank investors.

While it is too early at this writing to assess the full effects of World War II financing, since many costs remain to be liquidated after the cessation of hostilities, the nature and the enormous amount of the credit expansion are clearly indicated. This time, banks in the United States contributed to war financing through the purchase of large amounts of government obligations, which was in contrast to their great expansion of loans during World War I, as will be seen by comparing the following table with the chart on page 243. Of course, the amounts involved are much greater. It is also noteworthy that the wartime expansion of bank investments, with the volume of loans practically stationary, followed a decade in which the banks had already experienced a sharp expansion of investments and an even sharper contraction of loans.

The following table shows the amount and proportion of change in selected items of bank statements in the United States during the first four years of the nation's active participation in World War II.

INCREASE (+) OR DECREASE (-) IN SELECTED ITEMS FOR BANKS
IN THE UNITED STATES

(From Dec. 31, 1941 to Dec. 31, 1945)

	COMMERCIAL BANKS		MUTUAL SAVINGS BANKS	
	Change in Amount (In \$ millions)	Per Cent Change	Change in Amount (In \$ millions)	Per Cent Change
Total loans and investments	(+) 54,808	(+) 108.1	(+) 3,552	(+) 34.2
Loans	(-) 67	(-) 0.3	(-) 535	(-) 10.7
Investments	(+) 54,875	(+) 189.2	(+) 4,086	(+) 74.6
U. S. Gov't securities . .	(+) 55,770	(+) 258.0	(+) 4,628	(+) 125.1
Other securities	(-) 834	(-) 11.5	(-) 542	(-) 30.6
Total deposits	(+) 56,824	(+) 79.8	(+) 2,844	(+) 27.0
Interbank deposits . . .	(+) 1,256	(+) 11.4	.....	.....
Demand deposits	(+) 47,328	(+) 106.8	.....	.....
Time deposits	(+) 8,239	(+) 51.7	(+) 2,844	(+) 27.0

Questions for Study and Review

1. What determines the length of time a member bank must wait before drawing against an item deposited for collection with its Federal Reserve bank?
2. What are the advantages and disadvantages of accruing income and expense items?
3. Prepare a balance sheet for a national bank with at least five items on either side and having due regard to proper proportions among the various items.
4. Make a list of the more important differences between the balance sheet of a city bank and that of a country bank.
5. How is pronounced improvement in business likely to affect the size of each of the following items on a bank's balance sheet: loans and discounts, invest-

ments, acceptances outstanding, demand deposits, reserve with Federal Reserve bank, bills payable and rediscounts?

6 Summarize the effect of World War II on commercial banks and mutual savings banks in the United States.

Problem

(a) From the latest available report of the combined assets and liabilities of national banks in central reserve cities, calculate the percentage of each item to total assets

(b) Compare your percentages with those in columns 1 and 2 of the table on pages 170-171 and attempt to account for any important differences noted, assuming that data in columns 1 and 2 are, respectively, for the years 1928 and 1933

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CHAPTER 10

Bank Notes and Deposits

Notes and deposits compared. The public distinguishes sharply between bank notes and deposits. If the banking system is properly organized and regulated, the notes of all issuing banks are accepted on an equal basis by everybody in the community, even in times of emergency. On the other hand, checks, "deposit currency," are not accepted without reference to the standing of the maker or indorser, or both.

Wage earners may have no choice but to accept bank notes, because no other form of money may be available. Most people have no means of checking the solvency of the issuing bank, and, even if they had the means, they lack the ability to discriminate. For these reasons, the public has restricted the issuance of bank notes more severely than the function of accepting deposits. In fact, there is a tendency to grant the note-issue privilege only to the central bank or to a small number of banks within a given country.

Notes and deposits are alike, in that both are liabilities of the bank. However, the modern bank note is always a demand liability, while deposits may be payable at a specified future date, or after notice of specified length, as well as on demand.

In the United States and in some other countries, checks are used in much greater volume than are notes, the latter being employed mainly for paying wages and making purchases at retail.

Qualities of good bank notes. The most important qualities of good bank notes are: (1) parity, (2) safety, and (3) elasticity.

The notes of every issuing bank should circulate throughout the community at par with all other notes emitted by banks in the

system and with all other forms of currency used. Lack of parity, or limitation of par circulation to a part of the community embraced by the banking system, causes great inconvenience. The best assurance of parity is interchangeability of all forms of currency, or quick and easy redemption of all forms in a standard money. Other means of obtaining parity are employed. For example, the notes of every issuing bank, alike, may be given full or partial legal tender power or made receivable for public dues. National bank notes were legal tender for debts to any national bank and for all public dues payable within the United States, except import duties, interest on the public debt, and redemption of the national currency. Later, along with all other forms of money in the United States, they were made full legal tender for all debts.

There should be no doubt as to the ultimate redemption of bank notes. They may be a prior lien on the assets of the issuing bank, as were national bank notes. The deposit of specified amounts and types of collateral security with a public authority may be required by law, as has been done at various times in the United States; or total issues may be restricted to the amount of certain types of assets which the bank may own and set aside as security, as was formerly the case with the Bank of England. Notes may be guaranteed or insured. For example, the United States Government assumes liability for Federal Reserve notes; and notes of the chartered banks of Canada were insured by a circulation fund to which the ten banks contributed. The aggregate amount of notes to be issued by all banks may be limited, as was done in the national banking system prior to the Act of January 14, 1875; or the total issue of each bank may be limited on some basis, as with national banks and, formerly, with the Bank of France.

Elasticity of note issue means: (1) ability to expand and contract sensitively with the changing requirements of business, so that there will be no material redundancy or scarcity of money due to seasonal or cyclical fluctuations in demand; and (2) ability to expand rapidly in a banking crisis, to counteract the tendency of the public to convert deposits into currency and then hoard the currency.

While the qualities of parity, safety, and elasticity are usually mentioned in connection with bank notes or other forms of money, they are also requisite to a good system of deposit-and-check banking.

"Currency" vs. "banking" principle. The argument between advocates of the "currency" and "banking" principles of note issue

turns essentially upon the question as to whether emphasis should be placed upon safety or upon elasticity. The "currency" plan was embodied in the Peel Act of 1844, which allowed the Bank of England a relatively small "fiduciary" issue of notes against British Government bonds and required that all additional notes be covered, pound for pound, with gold. No metallic reserve was required against the "fiduciary" issue, since it was thought to be less than the minimum circulation that would always be needed by the country and hence would never be presented for redemption. The variable element in the Bank's note issue was covered by a reserve of 100 per cent, which admitted no doubt of the Bank's ability to meet any conceivable demand for redemption.

The "banking" school admits that such a plan provides an admirable degree of safety but contends that, in doing so, it makes the note issue utterly inelastic. Gold must be imported (or produced domestically) and lodged with the bank before note issue can be increased; and such expansion of notes is without significance, since the gold, itself, could be coined and put in circulation. Gold is imported to settle a balance of payments running in favor of a country, a condition which normally indicates that prices are relatively low and interest rates relatively high in the gold-importing country. The "banking" school points out that gold importation and the subsequent increase in note issue under such a plan begin only after the scarcity of currency has developed to an acute stage—that currency expansion under the plan can act only as a cure for the disease while a truly elastic currency would serve as a preventive.

An elastic currency. Adherents of the "banking" school would have notes issued against the general assets of the banks, although they would not object to making the notes a prior lien or to limiting, within reason, the kinds of assets which banks of issue would be permitted to acquire. Their argument runs thus: An expanding volume of business calls for an increased supply of bank notes and deposits. Business applies to the banks for loans, and the proceeds of loans, if made, are converted into bank notes or checks as required. Banks can provide an adequate supply of notes and deposits if they are permitted freely to issue both kinds of credit in exchange for the sound, short-term obligations of business.

Ability to expand deposits is not enough by itself. An expansion in the volume of business and of bank deposits is normally accompanied by a need for increased monetary circulation. Unless banks

are permitted to issue notes freely, they are compelled to pay out reserve cash. This tears the foundation from under their deposit liabilities and forces them to liquidate investments or call in the very loans which they are trying to expand in response to the demands of business.

As production and trade decline during a slack season, business concerns pay off their bank loans, deposits are reduced, and notes flow back into the banks.

Thus, says the "banking" school, a bank-note circulation that is based upon the general assets of the banks will expand and contract sensitively with the changing needs of business. For safety, this school relies upon the law, or public regulation, or the good judgment of bankers, to see to it that only sound assets find their way into the portfolios of the banks.

The "currency" school does not trust the judgment of bankers or the efficacy of public regulation under a system of the kind just described. It points to the fact that cyclical credit expansion too often gets out of hand; asserts that an inflated bank-note circulation magnifies a credit boom and converts the ensuing depression into a panic; and concludes that a community had better accept the inconvenience and restraint of a "currency" plan circulation in good times rather than risk the paralyzing effects of an unsound note issue during a period of public distrust.

History is on the side of the "currency" school; it is to be hoped that the future will justify the "banking" principle. Adequate elasticity is a quality of note issue that is sorely needed. It cannot be achieved under the "currency" plan. Nor can it be attained, *with safety*, under the "banking" plan until sound means of credit control have been devised and made effective. In the meantime, the wise and practical course is to compromise between the two principles, departing from the "currency" plan only as far as improvement in credit control renders such departure safe.

While nearly all the debate on the "currency" and "banking" principles has revolved around note issue, it should be realized that the same principles apply with equal force to deposits and checks. Here, too, safety should be the first consideration; here, too, elasticity is much to be desired; and here, too, elasticity, with safety, is difficult of attainment, for the very same reasons.

National bank notes. For nearly fifty years (1866-1914), the national banks had a monopoly of bank-note issue in the United States. A primary object of the National Bank Act was to estab-

lish a market for Government bonds and provide the country with a sound and uniform bank currency. Immediately before the Federal Reserve Act was passed (December 23, 1913), national banks could issue notes under two sets of provisions, ordinary and emergency, as follows:

Ordinary provisions. Each national bank was required to keep on deposit with the Treasurer of the United States a minimum amount of Government bonds, depending upon the amount of its capital stock: \$50,000, if capital stock exceeded \$150,000; an amount not less than one-fourth of capital stock, if capital stock was \$150,000 or less. The bank was then permitted to issue national bank notes up to par value of the bonds on deposit, subject to the right of the Comptroller of the Currency to call for additional collateral if the market value of the bonds fell below the amount of notes issued against them. Additional notes could be issued upon the same basis against a voluntary deposit of additional bonds, but the total outstanding circulation of each bank was limited to the amount of its paid-in capital stock.

Each bank received the interest on its deposited bonds. Its circulating notes were taxed at the rate of one-quarter of one per cent semiannually if issued against bonds paying interest at a rate not exceeding 2 per cent per annum, or at the rate of one-half of one per cent semiannually if issued against bonds paying interest in excess of 2 per cent per annum. The only requirement in the nature of a cash reserve was the redemption fund, a deposit of lawful money with the Treasury to an amount not less than 5 per cent of the notes outstanding. This was used to retire notes presented to the Treasury for redemption. The notes were prepared by the Government; and all expenses incident thereto, as well as expense of redemption and of shipping currency between the bank and the Treasury, were charged to the bank.

If a bank wished to reduce or discontinue its outstanding circulation, it could forward its own notes to the Treasury for cancellation or send lawful money to the amount of notes being retired. The lawful money was then held by the Treasury to redeem the bank's notes as they came in, and the bank's liability for notes outstanding was reduced by the amount of lawful money and notes sent to the Treasury. A proportionate amount of lawful money in the redemption fund was released. Also, the bank could at any time withdraw any of the bonds deposited with the Treasury which were

in excess of the minimum required by law and against which no notes were outstanding.

Federal Reserve Act and national bank notes. The Federal Reserve Act contemplated the ultimate retirement of national bank notes and their replacement by notes to be issued by the Federal Reserve banks.

National banks organized after December 23, 1913, were not required to establish or maintain a deposit of bonds with the Treasury but were permitted to deposit bonds and to issue notes against them under the conditions described above. The requirement that national banks organized prior to the enactment of the Federal Reserve Act maintain a minimum deposit of bonds was repealed by an act of June 21, 1917. Since that date, national banks have had the option of depositing bonds and issuing notes against them, subject to the other conditions outlined above and subject further to their ability to obtain bonds eligible to secure circulation.

The Federal Reserve Act provided a means for the gradual reduction of national bank circulation over a period of twenty years, beginning December 23, 1915. A national bank, desiring to retire all or part of its notes, was authorized to file with the Treasurer of the United States an application to sell for its account, at par and accrued interest, United States bonds securing circulation to be retired. The Federal Reserve Board could then require the Federal Reserve banks to purchase the bonds at par and accrued interest, and the Treasurer could use the cash realized from the sale of the bonds to redeem the related national bank notes as they were presented.

The twelve Reserve banks were not permitted to purchase, in the aggregate, more than \$25,000,000 of such bonds in any one year. Since more than \$700,000,000 of the bonds was on deposit to secure circulation when this provision went into effect, nearly thirty years would have been required to liquidate the circulation by this means alone. As a matter of fact, operation of the plan was discontinued soon after the United States entered World War I, and it was not resumed. The Reserve banks were authorized to issue Federal Reserve bank notes on the basis of bonds purchased by them under the plan.

Emergency provisions: the Aldrich-Vreeland Act (May 30, 1908). Following the panic of 1907, the Aldrich-Vreeland Act was passed to provide (1) for the appointment of a National Monetary

Commission to investigate and recommend changes needed in the national monetary and banking system and (2) for the issuance of emergency currency if required during the time that would elapse before the reorganization could be effected. The Act was to have expired on June 30, 1914, but was liberalized and extended for an additional year by section 27 of the Federal Reserve Act; it was broadened further by an amendment to this section, dated August 4, 1914.

Under the Act, groups of not less than ten national banks, with an aggregate capital and surplus of not less than \$5,000,000, were authorized to form national currency associations. Any member in a group could deposit with its association approved bonds and commercial paper and receive emergency bank notes. No bank was permitted to receive an amount of these notes in excess of its capital and surplus, and the aggregate for the nation was limited to \$500,000,000.

A 5 per cent redemption fund was required. The notes were taxed progressively, starting at 5 per cent per annum for the first month after issue and rising to the maximum of 10 per cent in the sixth month. The Federal Reserve Act reduced the tax to 3 per cent per annum during the first three months, with a progression of one-half of one per cent for each additional month until the maximum of 6 per cent was reached in the ninth month. The amendment of August 14, 1914, raised the limit for each bank to 125 per cent of capital and surplus and authorized the Secretary of the Treasury to extend the benefits of the Act to qualified state banks and trust companies which were members of the Federal Reserve System or agreed to join it not later than August 19, 1914. The Secretary was also empowered to suspend the \$500,000,000 limitation upon aggregate issue.

Following the outbreak of World War I, over \$380,000,000 of emergency circulation was issued during the fall and winter of 1914-1915. Because of the tax, it was retired rapidly after the money market was stabilized and interest rates were lowered to more normal levels.

Federal Home Loan Bank Act (July 22, 1932). Monetary circulation in the United States increased by about one billion dollars (25 per cent) during the last half of 1931, and the high level was substantially maintained during the first half of 1932. National banks had reached the practical maximum of circulation possible, owing to the limited amount of bonds bearing the circulation privi-

lege. Bonds issued during and after World War I were not eligible to secure circulation. Only \$674,625,630 of pre-war bonds was outstanding; of this amount, \$670,487,590 was on deposit to secure the \$669,570,345 of notes issued against them on July 1, 1932. An increased demand for circulation during the autumn months was anticipated. The paid-in common capital stock of national banks on July 1, 1932, aggregated \$1,589,685,815, so that there was a margin for an additional issue of about \$900,000,000 in circulation as far as the capital limitation was concerned.

Section 29 of the Federal Home Loan Bank Act authorized national banks, during a three-year period ended July 22, 1935, to issue circulating notes against the deposit of any United States bonds bearing interest at a rate not exceeding $3\frac{3}{8}$ per cent. The general conditions of issue, including tax, were the same as those applying to notes issued against 2 per cent bonds bearing the circulation privilege, except that these emergency notes were not subject to the retirement limitation imposed on ordinary circulation by section 9 of the Act of July 12, 1882. This section, as amended by the Act of March 4, 1907, set a limit of \$9,000,000 upon the amount of lawful money which may be deposited with the Treasurer in any one calendar month for the purpose of retiring national bank notes, with the proviso that the limitation "shall not apply to bonds called for redemption by the Secretary of the Treasury, nor to withdrawal of circulating notes in consequence thereof." This means that no limit was placed upon the rate at which the emergency notes could be retired by Treasury initiative.

Failure of national bank notes to expand. Despite the increased demand for currency which developed during the banking crisis of 1933, the total amount of bonds of all classes on deposit to secure national bank notes was, at the peak (May, 1933), less than \$230,000,000 above the amount which had been on deposit on July 1, 1932, when the emergency provision was enacted. Expansion of national bank notes provided only a small fraction of the \$1,700,000,000 of additional currency that went into circulation in the United States during the three weeks leading up to March 4, 1933. Less than \$100,000,000 of national bank notes was issued to banks against the deposit of bonds during the months of February and March, 1933.

There were two principal reasons for the failure of national banks to take full advantage of the privilege of enlarging their circulation. In the first place, from 20 to 40 days elapsed between the applica-

tion for and the receipt of new notes, depending on whether new plates had to be made. This was too slow for a sudden emergency such as the February-March crisis of 1933. Second, most of the banks had substantial excess reserves after the middle of 1933, and note issue was unprofitable under these circumstances. No cost was involved in paying out surplus cash, while the issuance of a bank's own notes involved the cost of procuring the notes from Washington, the later expense incident to redemption and cancellation, and the tax on circulation outstanding. Note issue is profitable to a bank only when it saves the bank from paying out needed reserve cash, and then only if the expense of note issue is less than that of replenishing reserves by other methods.

National bank notes eliminated. On March 9, 1935, the Secretary of the Treasury announced that the 2 per cent consols of 1930 and the 2 per cent Panama Canal bonds of 1916-1936 and 1918-1938 would be called for redemption on July 1, 1935, and August 1, 1935, respectively. These issues aggregated \$674,625,630 and were the only bonds specifically bearing the circulation privilege. The temporary authorization for issuance of national bank notes under the Federal Home Loan Bank Act was also to expire on July 22, 1935. Together, these factors meant the elimination of national bank-note issue after August 1, 1935, and the cancellation of national bank notes thereafter as rapidly as they came into the Treasury for redemption. The banks were left with an authorization to issue notes against a deposit of bonds but with no bonds available for the purpose. A desirable simplification of the national currency system was thus effected, although the action deprived national banks of the occasional opportunity to make a profit by the issuance of circulating notes.

Inelasticity of national bank notes. National bank-note circulation was never satisfactory, because it was, for various reasons, inelastic. In fact, it was often said to be perversely elastic. When the banks set out to acquire additional bonds against which to issue notes in response to public demand, their purchases forced a rise in the price of bonds and thus reduced the possible profit to be derived from the operation, or even converted it into a loss. Thus a desirable expansion of the currency was discouraged or prevented. On the other hand, a retirement of notes during a slack period left the banks with an investment in bonds having an abnormally low yield. If they tried to liquidate the investment, their sales drove

the price down until part or all of the profit was taken out of the operation.

National bank notes not only failed to expand and contract in line with seasonal and cyclical variations in the need for currency but, as we have seen, they were also unable to respond to the critical demand for currency that arose in the early part of 1933. It was the hope and intent of the Congress that an adequately elastic currency would be provided by Federal Reserve notes

The deposit function. The student of banking (and the banker) will do well to remember that a deposit is a liability of the bank. Depositors, in various ways, obtain claims against the bank which the latter must be prepared to pay as agreed. The speed with which depositors exercise their claims by drawing checks, etc.—that is, the velocity of the deposits—determines what percentage of deposits must be kept in cash or its equivalent, what percentage can be loaned or invested safely, and what the character of the loans and investments should be.

Like any business enterprise, a bank requires cash for various purposes. This cash comes from the sale of capital stock, from earnings kept in the business, from borrowing, and from deposits of cash and of claims on other banks (called primary deposits). Normally, primary deposits constitute by far the most important source of cash. Therefore, banks compete for primary deposits through the payment of interest and the rendering of various services to depositors.

Services rendered to depositors. A bank agrees to keep its depositor's funds safe and to pay all or part of them to him or his order on demand, or at some specified time, or after specified notice, in accordance with the terms of the deposit contract. By permitting a depositor to draw checks, the bank reduces the risk involved in cash payments, provides a receipt in the form of a canceled check, and renders periodic statements of account along with the return of canceled checks which simplify the depositor's task of keeping records. The bank cashes the depositor's checks at its counter, makes up pay rolls, and delivers cash to armored cars for safe transfer to his door. For the depositor it collects checks, drafts, notes, and other items payable by other banks and business houses in the same locality or anywhere in the world. Through its branches, offices, and correspondents it transfers funds for him to any point at home or abroad.

A bank also gives preference to its depositors in granting loans, on the principle that the depositor, during his nonborrowing season, supplies the cash on which loans to other customers are based and is therefore entitled to reciprocal accommodation.

The competition among banks for primary deposits, through the payment of interest and the rendering of numerous services without charge or below cost, became so severe and expensive that banks long ago began trying to limit it by clearing-house regulation or other forms of mutual agreement and by educational campaigns. In the United States, the Congress finally enacted legislation partly to limit such competition and partly to offset charges imposed upon them by Federal deposit insurance.

Restriction of interest on deposits. Section 19 of the Federal Reserve Act was amended by the Banking Act of 1933 and subsequent legislation to provide:

(1) That no member of the Federal Reserve System "shall, directly or indirectly, by any device whatsoever, pay any interest on any deposit which is payable on demand." Exceptions to this restriction were made in the cases of (a) any certificate of deposit or contract in effect on June 16, 1933; (b) any deposit payable only at an office located outside the States of the United States and the District of Columbia; and (c) until August 23, 1937, any deposit made by a savings bank and any deposit of public funds or trust funds if the payment of interest on such public deposits was required by State law.

(2) That "the Board of Governors of the Federal Reserve System *shall* from time to time limit by regulation the rate of interest which may be paid by member banks on time and savings deposits, and shall *prescribe* different rates for such payment on time and savings deposits having different maturities, or subject to different conditions respecting withdrawal or repayment, or subject to different conditions by reason of different locations, or according to the varying discount rates of member banks in the several Federal Reserve districts." It will be noted, first, that the Board is required, and not merely authorized, to limit the rate and to prescribe different rates. Second, there may be a question as to whether the phrase "shall prescribe different rates, etc.," may not, if interpreted literally, require the Board to fix the exact rates to be paid and not merely to fix the maximum rates. Thus far, the Board has prescribed only the maximum rates and these only on a uniform nationwide basis.

(3) That "no member bank shall pay any time deposit before its maturity except upon such conditions and in accordance with such rules and regulations as may be prescribed by the said Board, or waive any requirement of notice before payment of any savings deposit except as to all savings deposits having the same requirement." Deposits payable only at an office of the bank located outside the States of the United States and the District of Columbia are exempted from this rule.

The performance by a member bank of free services that are tantamount to payment of interest on demand deposits or a rate in excess of the maximum allowed on time and savings deposits is held to be forbidden by this section of the Act. Insured non-member banks are similarly restricted by the Federal Deposit Insurance Corporation.

Analysis of depositors' accounts. In increasing numbers, banks are analyzing depositors' accounts to determine whether the balances maintained are sufficient to support the activity of the accounts and to assess adequate charges when balances are deficient. A common method of analysis is illustrated by the following, based on one month's activities:

Average daily ledger balance	\$3,642.50
Deduct: average daily amount of funds in process of collection	796.40
Average daily collected funds	\$2,846.10
Deduct: necessary cash reserves and till money.	483.84
Amount of balance available for investment	\$2,362.26
Earning rate to be applied (3% per annum) . . . . .	.0025
Income earned on available balance	\$ 5.91
Cost of service on account:	
72 checks drawn against account (at 5¢)	\$3.60
168 checks and other items deposited (at 3¢)	5.04
Miscellaneous costs of account	
Account maintenance	2.60
Total cost of service on account	11.24
Excess of cost over income earned (billed to depositor)	\$ 5.33

The rate of earning applied, the costs of handling items, and the charge for account maintenance will vary among banks and will vary from time to time in the same bank. Some such method of metering the services rendered on accounts makes for equitable treatment of all depositors in accordance with the work they expect the bank to do for them, provided the charges are reasonable. It

would seem that depositors who maintain balances more than adequate to cover their costs should receive some interest on their excess balances, but this is forbidden by present law in the case of demand deposits, to compensate banks for their expense in connection with the insurance of deposits. If the depositor is also a borrower, he may be compensated by a preferential rate on his loans. There is no relief for the non-borrowing demand depositor.

Because of the expense involved in making analyses, most banks do not subject small household accounts to a "metered" charge but make a flat charge each month when the average daily balance falls below an arbitrary minimum. Some banks have a scale of charges which vary with the average daily balance maintained. Another practice, which seems to be gaining headway among the banks, is to base the monthly analysis on the lowest balance instead of the daily average, thus increasing the net charge and reducing the cost of analysis.

Protection to depositors in the United States. As noted above, depositors in commercial banks have generally been given less protection than have noteholders in the United States. National bank notes were a prior lien on the assets of the issuing bank in addition to being secured by a deposit of United States Government bonds. Such protection as has been provided for depositors has, in the main, taken the forms of a minimum legal reserve requirement and certain legal restrictions upon the loan and investment policies of the banks.

Depositors who are also borrowers are allowed to offset their deposit balances against their direct liabilities to failed banks, but not against their indorsed receivables which they have discounted with such banks. From the viewpoint of the borrowing depositor, the principle of offset seems fair enough, but to the remaining depositors it has some aspect of injustice. Depositors *A*, *B*, and *C* deposit \$100,000 in a bank and borrow nothing. After \$10,000 is set aside as reserve, the remaining \$90,000 is available for making loans and investments. Another group of depositors, *X*, *Y*, and *Z*, each of whom has \$6,000 on deposit, borrows the \$90,000, each taking a loan of \$30,000 and checking it out at once. Immediately thereafter the bank fails and in liquidation pays its depositors 60 cents on the dollar. Each of the borrowers receives full credit for his \$6,000 balance as an offset. *X* pays back the remaining \$24,000 of his loan, *Y* can pay only \$16,000, and *Z* can pay nothing. Depositors *A*, *B*, and *C* get back the \$40,000 repaid by *X* and *Y* plus \$20,-

000, while the remaining assets are consumed by receiver's fees.

Depositors *A*, *B*, and *C* feel that *X* should have been required to pay back the full \$30,000 he borrowed, if able to do so, and then share pro rata with them in the recovery of his deposit out of the net funds available for distribution. *X*, of course, feels that in reality he contributed at the outset \$6,000 of the \$30,000 he borrowed and therefore should repay only \$24,000, and it is on this theory that the offset is allowed by law. The only protection available to *A*, *B*, and *C* under the present law is to be sure of having at least as much borrowed as they have on deposit at the time the bank fails.

Guaranty and insurance of deposits. Various plans for the guaranty or insurance of deposits had been tried in the United States and abroad before Federal deposit insurance was enacted in 1933. As early as 1829, New York established the Safety Fund System, which at first covered deposits as well as notes. However, numerous bank failures in the succeeding decade demonstrated that the Fund was insufficient to cover both types of liabilities, and protection was withdrawn from deposits. On numerous occasions in the United States and elsewhere, strong banks have taken over weaker institutions that were about to fail and assumed the liability for their deposits, thus providing a sort of voluntary guaranty. Various governments have, in times of emergency, guaranteed the deposits of important banks, the failure of which would have meant national disaster.

Insurance companies have in the past also insured deposits in limited amounts, usually limited to a maximum of \$5,000 for a single depositor.

State guaranty of deposits. During the decade following the panic of 1907, eight States adopted some plan of deposit guaranty or insurance, and all of them were unsuccessful. The States, with the years in which the plan was adopted, were Oklahoma (1907), Kansas (1909), Nebraska (1909), Texas (1909), Mississippi (1914), South Dakota (1915), North Dakota (1917), and Washington (1917).

In general, each of these plans involved a sort of mutual insurance among the State-chartered institutions within a single State, national banks being forbidden by Federal law to participate. The contribution required of each participating bank was a percentage of deposits and was not graduated according to variations in the risk involved. When the fund was drawn down by failures, the

banks were required again to make annual contributions, in a limited percentage of deposits, until it was restored. Some of the funds issued interest-bearing obligations to pay depositors in failed banks, and some of these obligations are still outstanding and are being quoted at only a small fraction of their face value. None of the State plans was able to function satisfactorily when faced with numerous bank failures in years when crops failed or when crop prices suffered a serious decline. All of them have been repealed or allowed to become moribund.

The State deposit insurance plans failed for various reasons. It will be noted that most of them were tried in farming States. Being confined to a single State, there was too little opportunity for the constituent banks in each fund to diversify their risks, so that a single crop failure closed numerous banks and brought disaster to the fund. Furthermore, the existence of deposit insurance made depositors less critical of the banks and led them to deposit carelessly in whatever bank offered the most inducements. This increased competition among banks, especially on the part of those under aggressive and speculative managements, and encouraged the entrance of new banks into the field. The number of banks in States with deposit insurance increased out of proportion to the remainder of the country. Where participation in the fund was not compulsory, the stronger and more conservative banks refused to join; where it was compulsory, many of these banks escaped by surrendering their State charters and entering the national banking system.

Undue concentration of risk, over-expansion of banking facilities, with attendant excessive competition for business, and withdrawal of stronger banks were the chief factors that caused the State plans to fail.

Federal deposit insurance. Federal deposit insurance was provided for by section 8 of the Banking Act of 1933, which was incorporated as section 12B in the Federal Reserve Act. The Act contemplated the inauguration of a permanent insurance plan on July 1, 1934, but provided a Temporary Federal Deposit Insurance Fund which was to be effective from January 1, 1934, until the permanent plan could be placed in operation. Succeeding legislation postponed the institution of the permanent plan and continued the Temporary Fund, with some modification, until August 23, 1935, when the Banking Act of 1935 became effective.

The Federal Deposit Insurance Corporation. In accordance with the provisions of the Banking Act of 1933, the Federal Deposit Insurance Corporation was organized on September 11, 1933. The Corporation is managed by a board of three directors, one being the Comptroller of the Currency and two being appointed by the President by and with the advice and consent of the Senate. Its capital stock is owned entirely by the United States Treasury and by the Federal Reserve banks. The Treasury purchased \$150,000,000 of stock, and the Reserve banks were required to purchase an amount equal to one-half of the surplus of each Reserve bank as at January 1, 1933, or \$139,299,556 99, making a total capital of \$289,299,556.99. The Corporation is authorized to issue obligations in a par amount aggregating not more than three times the sum of its paid-in capital stock and the amount collected as assessments on insured banks during the year 1936.

Money of the Corporation not otherwise employed must be invested in the obligations of, or in obligations guaranteed as to principal and interest by, the United States, except that temporary deposits may be made with the Federal Reserve banks or with the Treasurer of the United States.

Beginning January 1, 1934, the Corporation insured the deposits of its member banks through the Temporary Fund.

The Temporary Federal Deposit Insurance Fund. All member banks in the Federal Reserve System were required to become "members" of the Federal Deposit Insurance Corporation, and State-chartered banking institutions were permitted to join subject to examination and acceptance by the Corporation. The maximum loss insured for each depositor in a single bank was, in the beginning, \$2,500, but this was increased to \$5,000. Each insured bank was required to subscribe to the Fund an amount equal to one-half of one per cent of its *insured* deposits and to pay in one-half of this amount at once. It was also liable for additional assessment up to the amount of its original subscription if the losses of the Fund should require such assessment prior to inauguration of the permanent plan. A procedure was established for settling the claims of insured depositors in the event of a bank failure similar to that described below under the permanent plan.

The Permanent Insurance Fund. The balance in the Temporary Fund was merged into the Permanent Insurance Fund when the latter was established, and the Corporation was authorized to

establish a separate "Fund for Mutuals" through which to insure such mutual savings banks as might apply for membership in this Fund and be accepted upon examination by the Corporation. Banks insured in the Temporary Fund were automatically included in the Permanent Fund, and provision was made for future admission of non-member State institutions upon application and approval. New national banks and new members of the Federal Reserve System are required to join.

The maximum insurance for a single depositor in one bank was kept at \$5,000, but a depositor can obtain additional insurance by depositing in more than one bank, as was also possible under the Temporary Fund. Trust funds held by an insured bank in a fiduciary capacity are insured up to \$5,000 for each trust estate, whether the funds are held in the bank itself or in another bank, and such insurance of trust funds is in addition to that of other deposits of the owner or beneficiary. The insurance applies only to deposits made available for withdrawal after March 10, 1933.

An insured bank is required to file with the Corporation two statements in each year (before January 15 and July 15) showing for the preceding six months the amount of its assessment base and the amount of assessment due. Assessment is at the rate of one-twelfth of one per cent per annum, except that the Corporation may fix a lower rate in the Fund for Mutuals. The assessment base is the average for six months of the bank's deposit liability less uncollected items which are included and credited subject to final payment. Thus a bank, under the Permanent Fund, contributes a percentage of its *total* collected deposits, and not of *insured* deposits only, as was the case under the Temporary Fund. This change obviously works to the disadvantage of large city banks whose depositors have large accounts.

The Act of April 13, 1943, suspended, until six months after the cessation of hostilities in World War II, the payment of deposit insurance assessments on United States Treasury deposits resulting solely from subscriptions for United States Government obligations.

Any insured bank that is not a member of the Federal Reserve System may terminate its status as such upon 90-days' written notice to the Corporation and upon notice to its depositors by publication or otherwise. The Corporation may require any insured bank to withdraw, after notice and hearing, if the bank is found guilty of violating the law or of unsafe and unsound practices. Upon voluntary or involuntary withdrawal, a national bank is re-

quired to surrender its national charter and a State-chartered member of the Federal Reserve System forfeits such membership.

If an insured bank fails, the Corporation is to make payment of insured deposits as soon as possible. The Corporation may deposit funds for this purpose in another insured bank. Before payment it requires a proof of claim and is subrogated to the rights of the depositor against the closed bank. The Corporation is appointed receiver of all closed national and District of Columbia banks and must accept such appointment in the case of insured, State-chartered institutions if tendered under State law by properly constituted authority.

The Corporation is authorized, at its discretion, to organize a new bank in the same locality as that of a closed insured bank, and may make loans to such closed banks and negotiate for their reopening. A new bank organized by the Corporation is not required to have any capital stock paid in at the outset, but must operate on a restricted basis until it is either wound up or organized under the general requirements of the National Bank Act.

Certain data regarding the Corporation are published monthly in the Federal Reserve Bulletin, and detailed reports are submitted to the Congress annually.

Expansion power. A bank's ability to expand loans and investments, or to make expenditures for any purpose, is based upon its excess reserves. The extent to which a bank can expand upon the basis of a given amount of excess reserve cannot be calculated in advance, because there are certain variable factors which cannot be anticipated accurately in a given case. However, it is helpful to know what those factors are and how they operate. Therefore, solely for illustration and without any pretense of presenting a typical or average situation, certain assumptions are made below for the purpose of explaining the general manner in which loan and investment expansion works out in a given bank and in the banking system as a whole.

(1) *Immediate cash withdrawal.* When a borrower comes to the bank for a loan, he usually expects to use the funds immediately or in the near future. However, banks commonly require borrowers to maintain a deposit balance in reasonable proportion to the loan. If the borrower has no balance or an inadequate balance at the time the loan is made, he will be asked to leave part of the proceeds with the bank as a deposit.

(2) *Redeposit of withdrawn cash.* Some of the checks which the

borrower draws against the bank will go to the people who deposit in the same bank and will therefore be redeposited in the lending bank. Assume that 10 per cent of withdrawals are thus redeposited.

(3) *Compensating balance.* Banks in increasing numbers are requiring borrowers to maintain what is termed a compensating balance. The practice probably originated with the thought that a borrower, during his non-borrowing period, should maintain a balance so that the bank could use it in accommodating other borrowers whose balances would, in turn, be available for loans to the first borrower when he later needed accommodation. The bank thus acts as an agency for accumulating funds which are temporarily idle and lending such funds until their real owners again require them.

The custom of requiring the borrower to maintain a "compensating" balance also during the time when he is in debt to the bank is primarily a means of obtaining interest income in excess of that which would be paid at the stated rate on the amount actually advanced. For example, if a customer borrows \$100,000 at 5 per cent and leaves \$20,000 on deposit, he pays \$5,000 per year for the use of \$80,000, and his effective rate is then 6.25 per cent. Assume for our purpose that 20 per cent of every loan is left as a compensating balance.

(4) *Required reserve.* Since a loan or investment may result in an increase in the deposits of the lending bank, it also may require a proportionate increase in the bank's reserve. Assume that a 15 per cent reserve is required, either by law or by good banking judgment, against deposits.

(5) *Deposits in other banks.* If one bank loans \$1,000, and retains only part of the proceeds on deposit, the remainder of the amount loaned must show up as a deposit in other banks, unless there is (a) a resulting increase in currency in general circulation or (b) an exportation of currency. Save for these two exceptions, it is axiomatic that any expenditure of a bank for making loans or investments, or for any purpose whatsoever, will result in an equal increase in deposits somewhere in the banking system.

On the basis of the above assumptions, we can now estimate how the making of a \$1 loan will affect the balance sheets of (a) the lending bank and (b) the banking system as a whole. The numbers in parentheses refer to the numbered assumptions above upon which the related calculation is based.

Effects of making a loan of \$1

	<i>Single Bank</i>	<i>Banking System</i>
Amount checked out (3)	\$ 80	\$ 80
Less amount redeposited in lending bank (2)	.08	.80
Net cash withdrawn	\$ 72	..
Increase in deposits (= Amount loaned minus net cash withdrawn)	\$.28	\$1.00
Reserve required against increase in deposits (4)	.042	\$.15
Total excess reserve required to loan \$1	\$.762	\$.15

On the basis of the assumptions made, it appears that a single bank can, in the first instance, lend \$1 for every \$.762 it has in excess reserves and that the banking system as a whole can lend \$1 for every \$ 15 in excess reserve.

If a bank, or the banking system, should expand investments instead of loans, the effect would be the same in principle but would differ in detail as follows:

Effects of investing \$1

	<i>Single Bank</i>	<i>Banking System</i>
Amount checked out	\$1.00	\$1.00
Less amount redeposited in investing bank (2)	.10	1.00
Net cash withdrawn	\$.90	..
Increase in deposits (= Amount invested minus net cash withdrawn)	\$.10	\$1.00
Reserve required against increase in deposits (4)	.015	\$.15
Total excess reserve required to invest \$1	\$.915	\$.15

It will be noted that, as far as the banking system as a whole is concerned, the expansion power is the same whether loans or investments are chosen as the medium of expansion and that the theoretical expansion power of the banking system is the reciprocal of the reserve ratio.

It will also be noted that when one bank expands its loans or investments, it inevitably increases the deposits in other banks in the system. And those deposits in other banks are, to them, primary deposits, which means that they increase the excess reserves in those banks by an amount equal to the difference between the deposit and the reserve required against it. This fact has an important bearing upon the problem of bank management and of credit control.

When Bank *A* takes the initiative in increasing its expenditures for any purposes and thereby increases the deposits *and excess reserves* in Bank *B*, the latter is under strong pressure to use the added reserve in some income-producing activity, such as the making of loans or investments. Failure to do so may bring criticism from three sources: (a) from the stockholders, because they want earnings and dividends; (b) from *B*'s customers, who desire accommodation at reasonable rates of interest; and (c) from the general public, which may accuse the bank of blocking business progress. Thus every bank is under pressure to go along with other banks when the banking system generally is expanding loans and investments.

While a bank is under *pressure* to follow other banks in an expansion movement, it is under *compulsion* to follow when contraction of bank credit gets under way. A reversal of the preceding tables will show that when Bank *A* needs to add \$.762 to its excess reserves, it must liquidate \$1.00 in loans. This liquidation will draw reserve cash from other banks and *force* them, in turn, to liquidate unless they have excess reserves with which to meet the withdrawal. The banking system as a whole must liquidate \$1 in loans or investments for every 15¢ that is to be added to cash reserve, if the reserve ratio is 15 per cent; that is, the factor of liquidation required will be the reciprocal of the reserve ratio.

The compulsion upon a single bank to liquidate when the system is liquidating is indeed so strong that a wise banker will not be satisfied to follow the lead of other banks but will attempt to get ahead of them so as to get the highest possible realization from his assets. The slow banker loses his bank.

Because of the pressure to follow during an expansion period and the compulsion to liquidate in a contraction period, it is vitally important that some means of credit control be developed to keep expansion from getting out of hand and that some adequate means be found to cushion the liquidation when it begins.

Questions for Study and Review

1. Why has the public restricted the note-issue function more severely than the function of accepting deposits?
2. State and explain the qualities of good bank notes.
3. Compare critically the "currency" and "banking" principles of issue.
4. Explain the present legal and actual status of the national bank note.

5. Why did national banks fail to issue notes to the maximum allowed by the Federal Home Loan Bank Act of 1932?
6. How is the payment of interest on bank deposits restricted in the United States? Why is this restriction imposed?
7. Explain the principle of offset
8. Describe the Federal deposit insurance plan as it is now operated.
9. Explain how credit expansion power is determined (a) for an individual bank, (b) for the banking system

Problems

1. On the basis of the following data given for one month, analyze the depositor's account and calculate the amount by which it is profitable or unprofitable to the bank:

Average daily ledger balance, \$63,281 80; funds in process of collection average 10 per cent of the ledger balance, necessary cash reserve and till money is 15 per cent of the collected funds, bank earns 2 per cent per annum on funds loaned and invested, 306 checks are drawn against the account, and 802 checks are deposited in the account; cost of maintaining the account is \$2 25 per month.

2. Assume: (a) that there are 10 banks of equal size in a banking system and that each will receive 10 per cent of any checks that are deposited in the country; (b) that 80 per cent of every loan is immediately checked out and redeposited in the system, the remaining 20 per cent being left on deposit with the lending bank; (c) that the reserve requirement is 20 per cent of deposits

(A) Now, if bank Number One lends \$100,000, what will be the resulting changes: (1) in its own balance sheet; (2) in the balance sheet of each of the other nine banks; (3) in the combined assets and liabilities of the ten banks?

(B) If bank Number One sells to individuals \$100,000 of bonds, receiving checks in payment, what will be the resulting changes: (1) in its own balance sheet; (2) in the balance sheet of each of the other nine banks; (3) in the combined assets and liabilities of the ten banks?

(C) How and to what extent will the excess reserve of bank Number One be affected by the transaction described in (A) above; by the transaction described in (B) above?

(D) How and to what extent will the excess reserve of bank Number Two be affected by the transactions described in (A) and (B) above?

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CHAPTER 11

Loans and Discounts

Management of funds. The most important function of a commercial banker is to manage properly the funds which are entrusted to his care by stockholders and depositors. In the performance of this function he is called upon to serve various interests which often appear to be in conflict with one another.

Stockholders rightfully expect a reasonable return on their investments. Moreover, failure to pay dividends will make it difficult in the future to obtain capital for starting new banks as needed, or for strengthening established institutions. When current earnings are unsatisfactory, the management, unless it controls a majority of the stock, may be ousted. One of the tests of bank management is ability, in uncertain times, to retain the support of stockholders while a conservative and apparently unprofitable loan policy is being pursued. In the long run a bank, like any business concern, must either show a profit or cease to function.

Depositors justly demand that the bank must keep their funds safe and be prepared to repay them as agreed. This practice at times requires a high degree of liquidity that will not permit large current earnings or an easy loan policy.

The *general public* expects the bank to keep in sound condition and, at the same time, to lend at reasonable cost an amount adequate to satisfy the legitimate short-term financing requirements of business and agriculture. There are different opinions as to what "legitimate" requirements are at any particular time. Public opinion exerts pressure upon bank management in numerous ways, including governmental regulation and control.

The *government*, which licenses banks to do business and regulates their activities in various ways, also expects them to invest liberally in its obligations, especially in times of emergency. This practice has become increasingly true of governments generally, including that of the United States.

While these various interests appear to be in conflict at times, they must be harmonized in the long run, or all will lose. It is the banker's difficult task to reconcile them from day to day as best he can.

Character of deposits. A bank's loan and investment policy is greatly influenced by the character of its deposits. A large percentage of stable time deposits relieves some of the pressure to maintain a high degree of liquidity. However, time deposits in the commercial banks of the United States have frequently proved to be almost as unstable as demand deposits.

The bank with many depositors of moderate-size accounts may enjoy greater stability and be less subject to unexpected, heavy cash withdrawals than the bank whose deposits come from relatively few big depositors. On the other hand, certain types of small depositors may be more easily stampeded into runs. Fickle depositors and volatile deposits require a high degree of liquidity in a bank's assets.

Deposits may vary widely with the seasons. This condition is especially true of banks at pleasure resorts and in one-crop agricultural districts. Nearly every bank experiences seasonal variations in the amount of its deposits. Regularly recurring withdrawals can be foreseen and provided for by arranging loan and investment maturities to correspond with the demands for cash.

Business cycles. A loan and investment policy must also take account of business cycles. Demand for loans is slack during a business depression; hence, at this time funds accumulate in banks. These must be invested or allowed to remain idle. As recovery gets under way, banks put their idle funds to work and also liquidate investments in order to accommodate their regular customers with loans. When recovery turns into a boom and as the boom progresses, banks must exercise increasing care lest they be caught in an overextended condition and forced, in adverse circumstances, to liquidate both loans and investments.

It is said that banks, as a group, have the duty to prevent over-expansion of business by restricting credit within proper bounds; that each bank, similarly, should protect its customers as well as

itself; and that, if banks perform this duty, there will be no over-expansion of business and hence no reaction. All of this theory sounds well, but, unfortunately, no means of preventing credit excesses in the banking system have thus far proved adequate in practice. Consequently each bank must take its own precautions to guard against losses brought on by the mistakes of other banks as well as by its own errors.

A banker cannot acquire complete immunity from loss during panics and depressions without liquidating most of his loans and investments in advance. To do this, he must have not only exceptional foresight but rare courage, for his borrowers will call him hard-hearted, his stockholders will cry for continued earnings, and the general public will accuse him of contributing to the depression.

Customers' demands. A bank's loan policy is necessarily affected by the nature of its customers' demands for accommodation. In some localities the demand for loans is rarely sufficient to employ all of the deposits of the community; moreover, banks anywhere are likely to have excess funds during certain months in each year. These idle funds must be loaned to other than regular customers of the bank, or invested. Such shifting of loans from one community to another where the need is greater, at least for the time being, is socially desirable, provided there is adequate means of testing credit. A bank with widely distributed branches, like the chartered banks in Canada, has a decided advantage in this respect.

Customers' loans are not always so liquid as they appear. If a borrower finds it impossible to pay as originally agreed, there is often nothing for the banker to do but extend the loan. This procedure is especially likely to take place where the business life of a community depends mainly upon a single industry or crop. A bank, in order to assure adequate liquidity among its assets, must therefore limit customers' loans to a reasonable proportion of its total loans and investments. The proper proportion will vary among different banks according to varying needs for liquidity and differences in the prevailing character of customers' loans.

A bank with numerous borrowers in widely diversified lines of business can safely place in customers' loans a relatively large percentage of its assets. Diversification of risks among various types of borrowers not only makes for safety but causes an orderly flow of funds into and out of the bank. Since borrowing seasons vary in different lines of business, one group can pay off its loans and thus release funds for the accommodation of others.

Self-liquidity vs. shiftability. Certain loans are said to be self-liquidating, because the borrowers use the funds to acquire or produce assets that will be sold to realize cash with which to repay the loans at maturity. Such loans, with maturities arranged to coincide with the bank's need for cash, are an ideal employment for commercial banking funds.

When maturing loans and investments fail to provide a bank with cash as rapidly as needed, it becomes necessary to sell some of the assets or borrow against them. The assets are thus *shifted* to other investors or lenders instead of being liquidated at maturity in the normal course of business. This practice is satisfactory for the individual bank as long as it can be sure of shifting assets in an emergency without taking an undue loss. But commercial banks as a group cannot rely upon the market, except to a limited extent. They are themselves an important part of the market; their loans and investments support it. If they withdraw as lenders and investors, and attempt to liquidate in wholesale fashion, the very bottom drops out of the market.

Since the banking system cannot, as a practical matter, suddenly shift a large part of its salable assets to the general public, commercial banks should limit themselves largely to self-liquidating loans and discounts, and should refrain from employing excessive amounts in purchasing, or lending against, securities.

Need for shiftability. Any individual bank will at times be confronted with unexpected cash withdrawals in excess of incoming funds. This condition will occur regardless of how carefully the bank may estimate future cash receipts and withdrawals and regardless of whether it limits itself to what it judges to be self-liquidating assets. Therefore, some method of shifting will be necessary from time to time.

Experience indicates that the same situation holds for all commercial banks, taken as a whole. Bankers are human, and optimism is contagious. It spreads from customer to banker, and back again. Alternating booms and depressions are likely to continue in some degree, even though better control is developed. Loans that appear to be self-liquidating when made, will turn out to be frozen or even worthless. Apparently conservative decisions made in a time of prosperity will, in the light of a succeeding depression, seem to have been foolhardy. Until a corps of bloodless robots can be bred to officer our banks, bankers will continue to make mistakes.

Errors of over optimism are not confined to the making of invest-

ments. Applicants for loans can be as convincing as the most masterful bond salesmen. True, the banker is usually better informed about his customers' affairs than about the bonds that he is asked to buy, but this special protection is too often offset by such factors as personal interest and friendship, local pride, or pressure which the local borrower can bring to bear.

If these assumptions are true (and no banker can thus far safely assume otherwise), each bank must prepare itself against the possibility that banks generally will, from time to time, be compelled to shift some part of their assets

Influence of central bank policy. In an emergency, a bank may obtain help from a central bank (Federal Reserve bank, in the United States) if the member bank has assets which are acceptable for purchase or discount at the central institution. Conservative banks therefore place a substantial part of their funds in assets of this kind.

A Federal Reserve bank may refuse to accommodate a particular bank, even though it offers eligible assets for sale or discount, or as security for loans, on the ground that the applicant bank is not conducting its affairs in a satisfactory manner or has already received more than its share of accommodation. With a threat of such refusal, Reserve authorities may exercise great influence upon the policy of a bank that anticipates a need for help.

Changes in the rediscount rates of Reserve banks alter the costs of accommodation to member banks. A rising rate at a Reserve bank puts member banks on notice that their costs of borrowing will be higher, and influences them to raise their own rates and thus discourage their customers from borrowing.

Reserve banks, in fixing their rates, may discriminate among various kinds of paper offered by member banks, and thus penalize or favor certain types of loans in comparison with others. For example, Reserve banks have, on occasion, charged higher rates on paper maturing more than sixty days after rediscount than on shorter maturities; also, they have favored loans secured by United States Government obligations over ordinary commercial loans. This discrimination was calculated to influence the loan and investment policy of member banks, and it had that effect. Rate discrimination in favor of advances secured by obligations of the United States was put into effect by some Federal Reserve banks in 1939 and by the remainder in 1942.

By liberally purchasing acceptances and United States Govern-

ment obligations in the open market, Reserve banks pour loanable funds into the market, reduce interest rates, and encourage banks to expand their loans and investments. Conversely, Reserve banks tighten the money market when they sell Government obligations.

A later chapter will indicate various ways in which Reserve authorities may influence member-bank loan policies. It is their duty to wield this influence in the best interest of the banking system and of the public as a whole.

Governmental regulation. Federal and state laws restrict in various ways the lending operations of commercial banks. Certain Federal restrictions apply only to national banks; others apply also to state banks and trust companies which are members of the Federal Reserve System. While many of the state restrictions are patterned somewhat after the Federal laws, they are in general less severe

Prohibited loans. No member bank may lend against, purchase, or hold its own shares, except when necessary to prevent loss upon a credit previously granted in good faith. Any shares thus acquired must be sold within six months.

No member bank, or any of its officers, directors, or employees, may lend or make a gift to any bank examiner who examines or is authorized to examine the bank.

No member bank may make a loan of more than \$2,500 to any of its executive officers. If an executive officer of a member bank becomes indebted to any other bank, he must make a written report to the board of directors of his bank, stating the date, amount, maturity date, purpose of the loan, and the security pledged against it.

Regulation of interest rate on loans. When the law of a state, territory, or district fixes a maximum legal rate of interest, this restriction applies to the banks chartered under that jurisdiction, except where a different rate is provided for banks.

Maximum legal rates chargeable by national banks are determined by three sets of circumstances:

(1) A national bank may charge interest at the rate allowed by the law of the state, territory, or district where the bank is located; or at a rate one per cent in excess of the discount rate on 90-day commercial paper in effect at its Federal Reserve bank, whichever is greater.

(2) Where the law of a state allows a different rate to banks chartered under its jurisdiction, national banks may charge the same rate.

(3) When no rate is fixed by the state, territorial, or district law, a national bank may charge 7 per cent; or one per cent in excess of the discount rate on 90-day commercial paper in effect at its Federal Reserve bank, whichever is greater.

Under Federal law, the discount of a bona fide bill of exchange at not more than the current rate of exchange for sight drafts, in addition to the interest, is not considered usury. Also, in addition to the maximum legal rate, a borrower may agree to pay and a bank may collect for certain expenses of preparation of papers, credit investigation, examination of title, inspection of property, and so forth.

A national bank making a usurious charge is liable to forfeiture of the entire interest; and, when a usurious charge has actually been paid by the borrower, he may recover twice the entire interest paid.

Regulation of secured loans. Restriction of real estate loans is described in the chapter "Bank Investments." Certain other types of secured loans are regulated in various ways.

The Board of Governors of the Federal Reserve System, upon the vote of six or more members, may fix, from time to time for each Federal Reserve district, the maximum percentage of individual member bank capital and surplus which may be loaned on "stock or bond collateral," and may change the limit on ten days' notice.

The Board may also "direct any member bank to refrain from further increase of its loans secured by stock or bond collateral for any period up to one year under penalty of suspension of all rediscount privileges at Federal Reserve banks."

Whenever, in the judgment of the Board of Governors, any member bank is making undue use of bank credit "for the speculative carrying of or trading in securities, real estate, or commodities, or for any other purpose inconsistent with the maintenance of sound credit conditions," the Board may, after reasonable notice and opportunity for hearing, suspend such bank from the use of the credit facilities of the Federal Reserve System. Such suspension may be terminated or renewed from time to time.

Securities Exchange Act (June 6, 1934). The Securities Exchange Act of 1934 directed the Board of Governors of the Federal Reserve System to prescribe rules and regulations, from time to time, with respect to the amount of credit that may be initially extended and subsequently maintained on any security (other than

an exempted security) registered on a national securities exchange. This maximum may be raised or lowered by the Board of Governors and has been changed from time to time. The Act and regulations under it are more fully discussed in the chapter "The Money Market."

Regulation of loans to affiliates. The Banking Act of 1933 forbids a member bank: (1) to loan to or purchase securities under repurchase agreement from any affiliate; or (2) to purchase the capital stock or obligations of any affiliate; or (3) to lend on the security of such capital stock or obligations if the aggregate of such loans outstanding and securities held will exceed 10 per cent of the bank's capital and surplus. Furthermore, the aggregate of such loans outstanding and securities held in respect of all the affiliates of a member bank must not exceed 20 per cent of the bank's capital and surplus.

Every loan made by a member bank to an affiliate must be secured by collateral having a market value at least 20 per cent in excess of the loan when the loan is made, except that: (1) the excess value is required to be only 10 per cent when the collateral consists of obligations of any state or political subdivision or agency thereof; and (2) margin requirements are waived when the collateral consists of obligations of the United States, Federal intermediate credit banks, Federal land banks, Federal home loan banks, the Home Owners' Loan Corporation, or paper eligible for discount or purchase by the Federal Reserve banks.

A loan to any officer, director, employee, or representative of any affiliate is deemed a loan to the affiliate to the extent that proceeds of the loan are for the benefit of the affiliate.

The above restrictions apply to holding company affiliates as well as to other affiliates, but do *not* apply to any affiliate which is: (1) engaged solely in holding the premises of the affiliated bank; or (2) engaged solely in the safe-deposit business or the business of an agricultural credit corporation or livestock loan company; or (3) engaged principally in foreign banking or other foreign financing operations under Sections 25 and 25A of the Federal Reserve Act; or (4) engaged solely in holding obligations of the United States, Federal intermediate credit banks, Federal land banks, Federal home loan banks, or the Home Owners' Loan Corporation.

Maximum loan to a single interest. In general a national bank is forbidden to lend more than 10 per cent of its capital and surplus at any one time to a single person, partnership, association, or cor-

poration (including subsidiaries in which the corporation owns or controls a majority interest). This prohibition applies directly to: (1) accommodation or straight loans, whether or not single name, including liability as guarantor or indorser (other than accommodation indorser) of paper not specifically excepted; and (2) loans secured by stocks, bonds, and real estate mortgages. Various exceptions to the 10 per cent limit are summarized in an official form of the Comptroller of the Currency, which is shown on pages 208-209.

Kinds of loans. Loans may be classified in various ways, according to viewpoint. The classes listed below are not mutually exclusive, nor do they exhaust the distinctions that may be made. However, they are a sufficient basis for the discussion of loan policy.

(A) **Classified as to maturity.** These include (1) *demand loans* and (2) *time loans*. Demand loans are callable at any time and also payable at the option of the borrower. They may be allowed to run indefinitely if the borrower's condition remains unchanged, and in normal times it is the borrower who usually terminates them. Time loans and discounts have a definite maturity, but it is frequently understood that they will not be paid when due. Instead, they may be renewed in whole or in part, or even increased. The final date of payment should be clearly understood, however, for commercial banks cannot properly undertake to furnish permanent capital to borrowers.

(B) **Classified as to form.** These loans may be either (1) *secured* or (2) *unsecured*. In the United States, the unsecured loan has been relatively more important than the secured loan. Probably the chief reason for this has been the abundant opportunity for profitable ventures in a rich, undeveloped land and the spirit of confident speculation which it has engendered. "Don't sell America short" has expressed the thought of commercial bankers as well as borrowers, investors, and speculators. While opportunity is rife in a new country, suitable collateral for bank loans is scarce. The prevalence of unsecured loans has no doubt been due in part to this fact, coupled with the intimate contact between banker and borrower under the independent banking system that has existed in the United States.

Loans may be secured by the indorsement or guaranty of parties outside the risk, or by collateral of different kinds. An increase in the relative importance of secured loans in the national banking system was clearly evident up to 1928, when the Comptroller of the

OFFICIAL FORM OF THE COMPTROLLER OF
THE CURRENCY NO. 1416-B

Obligations	Amounts Loanable
(A) Accommodation or straight loans, whether or not single name, including liability as indorser (not accommodation indorser) or guarantor of paper not coming within the exceptions 2 and 4.	Maximum limit, 10 per cent of bank's paid-up and unimpaired capital and surplus
Loans secured by stocks, bonds, and authorized real estate mortgages.	
(1) Drafts or "Bills of exchange drawn in good faith against actually existing values."	No limit imposed by law
(2) Commercial or business paper (of other makers) actually owned by the person, company, corporation, or firm negotiating the same	No limit imposed by law.
(3) Obligations secured by goods or commodities in process of shipment.	No limit imposed by law
(4) Obligations as indorser or guarantor of notes (other than commercial or business paper) maturing within six months, owned by indorser.	15 per cent in addition to 10 per cent. (A).
(5) Bankers' acceptances of the kinds described in Sec. 13 of the Federal Reserve Act.	No limit imposed by law
(6) Obligations secured by shipping documents, warehouse receipts, or other such documents conveying or securing title covering readily marketable nonperishable staples—	15% secured by 115% 5% secured by 120% 5% secured by 125% 5% secured by 130% 5% secured by 135% 5% secured by 140%.
(a) When the actual market value of the property is not at any time less than shown in table herewith.	40% in addition to regular 10 per cent loan. (A).
(b) When the property is fully covered by insurance (if customary to insure such commodity) and in no event shall this exception apply to obligations of any one customer arising from the same transactions and/or secured upon the identical staples for more than ten months.	

OFFICIAL FORM OF THE COMPTROLLER OF
THE CURRENCY NO. 1416-B (*Continued*)

Obligations (<i>Continued</i>)	Amounts Loanable (<i>Continued</i>)
(7) Obligations secured by shipping documents or instruments covering live-stock or giving a lien thereon.	15 per cent in addition to regular 10 per cent loan (A). If security is 115% of obligation
(8) Notes secured by not less than a <i>like face amount</i> of bonds or notes of the United States issued since April 24, 1917, or by certificates of indebtedness of the United States, Treasury bills of the United States, or obligations fully guaranteed by the United States as to principal and interest.	15 per cent of bank's capital and surplus, <i>in addition</i> to the amount allowed under (A), or if the full amount allowed under (A) is not loaned, then the amount which may be loaned in the manner described under (8) is increased by the loanable amount not used under (A). In other words, the amount loaned under (A) must never be more than 10 per cent, but the aggregate of (A) and (8) may equal, but not exceed, 25 per cent.
(9) Loans to any bank or representative in charge of its business, when approved by the Comptroller of the Currency (Act, May 20, 1933).	No limit.
(10) Obligations unconditionally guaranteed by a Federal Reserve bank or by the United States.	No limit.
<p style="text-align: center;"><i>Banking Act of 1933</i></p> <p>Sec. 23A (Sec. 23A of Federal Reserve Act as added by Sec. 13, Banking Act of 1933.) Affiliates—Loans and credits to; repurchase agreements with; investments in, and obligations of; loans secured by obligations of; collateral to credit of any kind must be in form of stocks, bonds, debentures, or other such obligations having a market value 20 per cent more than advances, except if issued by State or political subdivision value may be 10 per cent. See exception to security in act as quoted.</p>	
Sec. 24A. (Sec. 24A of Federal Reserve Act as amended by Sec. 14, Banking Act of 1933) Loans to or secured by stock of corporations owning banking house, together with investment in and/or stock and obligations of corporation owning premises.	<p>Aggregation of all to one affiliate limited to 10 per cent of capital and surplus</p> <p>Aggregate of all to all affiliates limited to 20 per cent of capital and surplus.</p> <p>Limited to amount of capital stock. (Unless Comptroller approves a greater amount.)</p>

Currency discontinued publication of the pertinent data, and it is probable that the trend has continued. Wider distribution of suitable collateral among borrowers is probably the chief reason for the increase.

(C) **Classified as to borrowers.** The two main types of such loans are (1) *loans to customers* and (2) *loans to others*, or outsiders. Customers are regular depositors of the bank. For the most part they are local borrowers, but large city banks do a substantial volume of business with out-of-town customers. Loans to others include commercial paper and acceptances bought in the open market, and loans to brokers or others when there is no implied understanding that the bank will renew the loan at the borrower's request. For this reason such loans are more liquid than customers' loans, many of which carry at least a tacit agreement that the bank will renew at maturity.

Banks commonly extend *lines of credit* to their better customers, thereby agreeing in advance of a customer's borrowing season to lend up to an agreed maximum if the latter's position does not change. For example, it will be understood that a 90-day loan of \$100,000, made at the beginning of the borrowing season, may be increased to \$200,000 for the next ninety days, and then renewed for \$150,000 for a third period of ninety days. Such loans, if extinguished at the end of the borrowing period, are truly self-liquidating, although they were not so at the maturity of either of the first two notes.

A particularly frozen type of customer's loan occurs when the borrower has lines of credit at several banks and borrows from one bank to pay loans at another, without ever getting completely out of debt to his banks as a group. The following schedule of borrowings illustrates the case:

SCHEDULE OF BANK LOANS
(000 Omitted)

Bank	Line of Credit	INDEBTEDNESS					
		Jan.	Feb.	Mar.	Apr.	May	June
A. . . .	\$1,000	—	—	—	\$ 600	\$ 600	\$ 600
B. . . .	1,000	\$1,000	\$1,000	\$1,000	800	800	800
C. . . .	500	400	400	400	—	—	—
D. . . .	300	300	300	300	200	200	200
E. . . .	200	100	100	100	100	100	100
Total . . .	\$3,000	\$1,800	\$1,800	\$1,800	\$1,700	\$1,700	\$1,700

SCHEDULE OF BANK LOANS (*Continued*)

Bank	Line of Credit	INDEBTEDNESS					
		July	Aug.	Sept	Oct.	Nov.	Dec
A. . . .	\$1,000	\$ 800	\$ 800	\$ 800	\$1,000	\$1,000	\$1,000
B . . .	1,000	—	—	—	600	600	600
C . . .	500	500	500	500	400	400	400
D . .	300	200	200	200	—	—	—
E. . .	200	200	200	200	—	—	—
Total	\$3,000	\$1,700	\$1,700	\$1,700	\$2,000	\$2,000	\$2,000

This borrower is *in the clear* with each bank for three months in the year, and with at least one bank at all times. Therefore, each bank may consider its loan self-liquidating; all of this paper may be eligible for discount at the Federal Reserve bank. However, the borrower never owes less than \$1,700,000 to his banks as a group. Since his maximum borrowing is \$2,000,000, his seasonal expansion is only \$300,000. Obviously the banks as a group are furnishing to this business \$1,700,000 of permanent capital, which should be obtained elsewhere. All goes well as long as business is good. But let the borrower's receipts decline, and the vulnerable position of both borrower and banks becomes at once evident. One or more banks grow uneasy and decide to *cancel the name*, leaving the remainder to hold the bag. Unless the remaining banks can persuade other banks to take up the credit line, they are compelled to assume the entire burden and risk among themselves, at least temporarily. However, they are certain to press for liquidation and, in doing so, are equally certain to embarrass the borrower, if not to bankrupt him.

Multiple or "rotating" bank lines of the kind just described are an outgrowth of the American system of independent banking. In nearly every community there are business units which require more bank accommodation than any one bank in that community can offer. Such a concern must either arrange multiple lines of credit or go to a larger community at some distance for a banking connection. Smaller concerns, by preference rather than necessity, adopt the same practice, to escape dependence upon a single bank. Multiple lines, once opened, are too frequently abused. In hard times, banks generally awake to these abuses and take steps, often too drastic, to eradicate them; but the succeeding periods of prosperity and optimistic lending have always witnessed a revival of the multiple credit line practice.

(D) **Classified as to purpose.** Included here are four principal types of loans: (1) *consumption loans*, (2) *capital loans*, (3) *commercial loans*, and (4) *security loans*. This is the most significant basis of distinction.

(1) *Consumption loans.* A consumption loan is a loan the proceeds of which are used to purchase something that will be consumed by the borrower and not sold to realize funds with which to extinguish the loan at maturity. Traditionally, commercial banks have not favored such loans. For repayment of these loans, banks must rely upon the borrower's income from other sources, upon indorsements or guaranties, or upon collateral security. The loans are usually for small amounts, and consequently the costs of credit investigation, bookkeeping, and collection are relatively high.

Many commercial banks have organized personal loan departments to handle this business and have found them to be profitable. Special charges may be made to cover the cost of investigation, and payments are made on a weekly or monthly installment basis. This plan increases the yield to the bank, since a relatively high rate of interest is usually charged on the face amount of the loan to maturity, and is rebated on the periodic payments at a lower rate, if at all.

(2) *Capital loans.* A capital loan is any loan the proceeds of which are more or less permanently tied up in the borrower's business. Commercial banks, as a rule, have not favored capital loans when they have recognized them as such; but seemingly temporary commitments often turn out to be frozen. For example, a manufacturer's sales outrun his productive capacity as a period of prosperity gets well under way. Finally he decides to build and equip an addition to his plant. He persuades a bank to finance him pending receipt of increased income or permanent financing. Just when the new machinery is installed, the boom collapses, earnings decline instead of increasing, the new financing falls through, and the bank is left with a permanent capital loan on its hands.

Another type of capital loan was described above in connection with multiple or "rotating" credit lines.

(3) *Commercial loans.* Loans made to cover the short-term financing requirements of industry, trade, and agriculture are called commercial loans. In considerable measure they are self-liquidating and are therefore a preferred medium for the employment of commercial bank funds.

One-name paper. American business practice is such that a large

percentage of commercial loans is *one-name paper*. Sales are made, typically, on open book account, with a discount offered for quick cash payment. For example, terms of "2/10, net 30" are quoted, meaning that 2 per cent may be deducted if payment is made within ten days from date of invoice and that the net amount of the invoice is payable within thirty days. On a \$100 purchase, the buyer will gain \$2 by paying twenty days before the bill is due; this amount is equivalent to 36 per cent per annum. An alert buyer, whose credit is good, will borrow at his bank if he needs additional funds to take advantage of cash discounts. His note will be single-name paper, but it is desirable from the bank's viewpoint, provided the goods will be processed, sold, and collected against to realize cash with which to pay off the loan within reasonable time.

The seller may also borrow on his own note to cover the period required to process, sell, and collect on his accounts receivable. Thus another piece of single-name paper goes to the banks.

In making loans of this character, a bank should be able to anticipate the date of payment by inquiring into the sales and collection experience of each borrower, and by judging whether the near future is likely to prove an exception to the record in any given case. While the notes may be drawn for sixty or ninety days, the banker may realize that the borrower will not get out of debt for a period of six, or even nine or ten, months; but the date of ultimate payment should be determinable and should be not too distant if the loan is to be made out of demand and short-time deposits. Obviously the bank must carefully investigate every such prospective borrower as to character, financial strength, credit record, and ability to sell at a profit and to collect against sales.

Single-name paper may be unsecured, or secured by collateral.

Two-name paper. Two-name paper may take the form of: (1) a customer's note bearing an accommodation indorsement or guaranty; or (2) a trade receivable. The presence of an accommodation indorsement or guaranty simply means that the borrower's credit is not sufficiently good to stand as its own security.

Trade receivables may be in the form of promissory notes or trade acceptances. The buyer may give the seller a promissory note which, when indorsed by the latter, becomes two-name paper. Or, the seller may draw a draft on the buyer to cover the invoice. Such a draft, when accepted by the buyer, is a trade acceptance. The seller may indorse it and offer it for discount as two-name paper.

A true trade receivable is an excellent asset for a commercial

bank. It has an advantage over open book accounts in that it carries the buyer's acknowledgment of indebtedness; it also evidences an actual movement of goods which presumably can be sold to pay the loan. The bank may base its judgment of the risk upon the credit standing of either name, the buyer or the seller, or both names. Usually, the bank relies chiefly, or altogether, upon the credit of the seller, because the task of checking both names is often too burdensome.

Some lines of business use trade receivables in the ordinary course of trade, and hence such an instrument represents an actual movement of goods concurrently with the drawing of the paper. However, promissory notes and drafts are also commonly used in many instances merely as a means of obtaining a formal acknowledgment of debt when overdue accounts are being extended. Drafts are often just another step of follow-up in a series of collection efforts. Sellers also frequently take notes or acceptances from buyers who are slow pay when sold on open account. In this case, the seller assumes that the buyer will be more likely to pay when the paper is presented for collection through a bank in his community. Again, sellers whose credit standing is poor sometimes obtain acceptances from buyers whose credit is good, and seek access to bank credit through the discounting of this paper. Trade receivables may even be *kited*; that is, one concern may exchange its note or acceptance for the paper of another, and each may then attempt to discount the paper at its respective bank. Obviously, a bank cannot favor two-name over single-name paper merely because two names appear on the former, but must investigate each risk carefully on its own merits.

Instead of being discounted, trade receivables may be used as collateral to secure loans. Accounts receivable may also be pledged to secure loans.

Commodity loans. Commodities, through the medium of various documents conveying or securing title to them, are used as collateral to secure loans. Such documents are: bills of lading, warehouse receipts, elevator receipts, cotton tickets, compress receipts, trust receipts, and so forth. The suitability of a particular commodity or piece of merchandise for use as collateral for bank loans depends upon various factors, among which the most important are durability, marketability, stability of value, and ease of identification. To show how bankers' risks vary with the type of document used and to indicate the care which must be exercised in connection

with these loans, the three most important of these documents will be discussed briefly.

A *bill of lading* is a document issued by a common carrier to a shipper, acknowledging receipt of goods and agreeing to transport them under the conditions stipulated. A *straight* bill of lading conveys title to the consignee only, and is non-negotiable. Hence it is not good collateral. An *order* bill of lading is negotiable and must be surrendered, with proper indorsement, before the carrier will deliver the related goods. The holder in due course has title to the goods.

Among the various risks to which the lender is subjected are the following: (1) On account of improper loading or packing or other causes for which the carrier cannot be held responsible, the goods may be damaged in transit. (2) Duplicate bills may be issued and not marked, and delivery may have been made on the original. When bills are issued in sets, and delivery is made against any one of the set—as in grain shipments on the Great Lakes—the lender must have possession of all the bills in the set. (3) The bill does not guarantee quality of goods shipped, or even quantity when the bill reads “cases said to contain . . .” of a certain weight, or “shipper’s loan and count.” (4) Part of the goods may have been delivered and not indorsed on the bill. (5) Bills may be issued against fraudulent shipments, with or without collusion between the shipper and the carrier’s agent, or against no shipment of goods whatever.

Considerable progress toward reducing the lender’s risk and improving his legal status has been made by the following measures: (1) the issuance of a uniform bill of lading by leading railroads, (2) the adoption of the Uniform Bill of Lading Act by a majority of the states, and (3) the enactment of the Federal Bill of Lading Act.

A *warehouse receipt* acknowledges receipt of goods for storage, and agrees to deliver the same on demand if the stipulated conditions as to charges, indorsements, and so forth, are fulfilled. Receipts may be negotiable or non-negotiable. They may or may not state the quality and quantity of goods covered. Warehouses differ in financial responsibility and in quality of management. The warehouseman assumes responsibility for loss or damage due to certain causes within his control—such as theft, leaky roofs, and so on—but does not insure against fire or other hazards beyond his control. Hence the lender must obtain adequate insurance protection.

Certain agricultural products may be stored in warehouses or elevators licensed under the Federal Warehouse Act; various states also have legislation covering the supervision of warehousing.

Trust receipts are used in domestic as well as in foreign trade to permit the buyer to have possession of the goods for processing or display without holding title to them. Title is held by the seller or the lender, and the buyer acts as trustee, agreeing to remit for the goods as they are sold.

If the buyer sells the goods without remitting, he is not only liable to a criminal charge of conversion but subject to a civil suit for the amount involved as well. Unfortunately the creditor does not collect by merely putting the trustee-debtor in jail. Furthermore, in transactions involving trust receipts, the law does not always protect the lender as fully as the seller. Other creditors may allege that the lender was given a trust receipt in an attempt to give him a prior lien on the related goods in contemplation of the debtor's insolvency. In an effort to protect themselves against this contingency, banks sometimes have the goods invoiced and shipped to them, and then turn the goods over to the trustee-debtor who, in such an instance, has never held title to the goods.

Another serious difficulty arises from the necessity of identifying the particular goods covered by the trust receipt. For example, a grocer holding a quantity of canned tomatoes under a trust receipt might sell them and use part of the proceeds to buy additional stock of the same brand to replace the first lot on his shelves. The lending bank would have difficulty in proving conversion, and, if the grocer became insolvent, it would have equal difficulty in proving that the goods in stock were the identical ones covered by the trust receipt. If the grocer testified in an effort to support the bank's claim to a prior lien on the goods, other creditors might allege collusion.

This difficulty can be overcome in the case of certain manufactured goods—such as automobiles, radios, and typewriters—which bear a manufacturer's serial number. Even in such instances, a bank will sometimes insist that the trustee goods be prominently tagged or marked as being the property of the bank, so as to put other creditors on notice.

In making loans against commodities, banks must look into the credit standing of the borrower, the bailee, and the commodities themselves. The borrower becomes a less important factor in the case of loans against bills of lading and warehouse receipts, when

the quality as well as the quantity of goods can be definitely ascertained, when the reliability of the bailee is beyond question, and when the goods themselves have all the essential qualities of good collateral security.

(4) *Security loans.* Stocks, bonds, and other obligations are widely used as collateral security for bank loans, and the proceeds of such loans are employed for every conceivable purpose. Individuals may pledge securities against loans to pay debts, to buy consumption goods, to purchase securities as an investment, or to speculate in securities or commodities, or otherwise. Business concerns pledge securities to obtain loans for ordinary commercial purposes, for capital expenditures, and for similar transactions. Investment bankers pledge collateral on loans to enable them to carry securities which they have underwritten, pending sale, and for other purposes. Stock brokers borrow against securities to obtain funds with which to carry their customers' speculative and investment accounts, and for similar purposes. A bank cannot always determine the exact purpose for which its loans will be used. Speculative and investment borrowing accounts for a large percentage of security loans.

Most of the security loans, especially in the larger cities, are made against stocks listed on exchanges and having a more or less active market. Value of collateral can therefore be readily determined, and changes in value are quickly revealed. Stability of value and marketability determine what will be a safe margin between the value of collateral and the amount of the loan. When a loan is adequately margined with collateral having stable value and an active market on an exchange, the lending bank can rely chiefly upon the collateral and relatively less upon the credit standing of the borrower. The bank must, however, guard against taking too much of any one single security as collateral from all of its borrowers in the aggregate, because forced liquidation of a relatively large block of a security may seriously depress the value of that security, and thus force the bank either to take a loss or carry loans on the chance that a more favorable opportunity for liquidation will come later.

When a loan is made against unlisted or inactive securities of unstable value, the bank must require a larger margin and look to the credit standing of the borrower.

In making security loans, whether at call or on time, the bank reserves the right to call upon the borrower to post additional col-

lateral if the margin becomes unsatisfactory, and to demand immediate payment of the loan in case the required collateral is not forthcoming. Borrowers are permitted to replace securities pledged against loans by substituting different securities if the new collateral is satisfactory to the lending bank. When the bank is relying entirely, or even in substantial degree, upon the collateral for the safety of a loan, it obviously must watch the collateral carefully to guard against shrinkage of margin.

Liquidity of secured loans. Collateral loans against securities or commodities having stability of value and an active market on an organized exchange are, in normal times, among the most liquid assets that a bank can have. However, impartial students of banking, as well as prejudiced critics of security loans, point out the fact that the commercial banking system, as a whole, can never hope to liquidate a large part of its collateral loans in a short period of time without disastrous losses to the banks and to the entire community.

While small banks, and others who feel no responsibility toward the money market, may be able to liquidate sound security loans even in times of general emergency, larger banks, especially in New York City, are sometimes forced in self-protection to maintain their loans, or even to increase them to absorb loans which other lenders insist upon liquidating. For example, one need only recall the three weeks in October, 1929, when New York City banks increased their loans to brokers by more than a billion dollars in order that other lenders might reduce their commitments without an utter collapse in all security values.

The defender of security loans must admit the truth of the above statements, but he asks whether the facts are not equally true of any other type of loan. Could the banking system suddenly liquidate any substantial part of the commercial loans, without disastrous results to the banks and to the community? The answer is certainly no. But there is a vital difference between loans against commodities and merchandise that are in the stream of production and commerce. These goods are sold in the normal course of business, and the proceeds of the sale can be used to pay off the loans made against the goods. The goods are consumed and must be replaced. Consumers, in their other capacity of producers or traders, earn the means of purchasing new goods. Unless subjected to some shock, the cycle of production, trade, and consumption can go on indefinitely. In a perfected credit system, volume could be held

in check when expanding, and reduced by gradual degrees when desired, without the shock of sudden liquidation. Sound commercial loans will liquidate automatically within a few months if business is not seriously disturbed; the same cannot be said of loans against securities.

To relieve any ordinary strain in the banking system, rediscounting institutions, such as central banks or Federal Reserve banks, can safely step into action by discounting self-liquidating paper. Relieved of strain, the normal processes of industry, trade, and consumption will continue and will liquidate the paper.

Unfortunately, a perfected credit system has not yet been attained. Credit expansion is not subject to timely or velvety control. Inflation is allowed to go unchecked until, in extremity, the violent brakes of deflation and forced liquidation are applied. There is a drastic fall in the prices of securities, commodities, merchandise—everything. Even good commercial loans, because they cannot be liquidated at face value, are no longer good. If the banker rediscounts them at a Federal Reserve bank to obtain temporary relief, they simply return again at maturity to plague him once more. Other assets must be substituted at the Reserve bank, and the maturing paper must be renewed or, at best, collected only in part.

Until the means of credit control have been greatly improved, banks will continue to find that their heaviest losses in times of crisis will come from customers' loans, mortgage loans, and investments—not from loans against stock exchange collateral, for the margins on these loans can be watched, and the loans can be liquidated with little or no loss. In these circumstances, the realistic banker will probably continue to count sound stock exchange loans among his safest and most liquid assets. This statement is especially true of the great majority of bankers who are not placed where they have a sense of responsibility for the national money market. To the average banker the interests of his individual bank during a crisis do not appear to be identical with the interests of the banking system as a whole.

"Term loans." Industry and trade always have a need for capital loans running for intermediate terms of, say, from two to ten years. Large concerns have obtained such funds from the investment market, but smaller concerns have found this market either closed or relatively too expensive. The handicap to business units

of small and medium size has been increased in recent years by new restrictions imposed upon the investment market in such a way as to raise the relative cost of floating small issues.

This condition has led to proposals that new financing institutions be developed to provide intermediate credit to industry or that commercial banks place a larger portion of their funds in loans of longer duration. Many banks have responded to the demand, making "term loans" which for the most part have had a maximum duration of from three to five years, with provision for amortizing the principal by periodic payments. Large "term loans" are usually made by groups of banks; and loans running longer than five years may be made in conjunction with life insurance companies, which take the notes with maturities over five years.

"Term loans" may be secured by hypothecation of specific assets or may be otherwise protected by agreements restricting the borrower in such matters as dividend and salary payments; retirement of preferred stock, bonds, or other debt; pledging of assets or income to other creditors; use of the borrowed funds; maintenance of minimum working capital position; limiting total borrowings to a maximum percentage of current assets. The interest rate on "term loans" is subject to negotiation between the parties and is often scaled upward on the notes with longer maturities.

Assuming thorough investigation and proper safeguards, there is no reason why such loans should not be expected to pay out in accordance with their terms. From the bank's viewpoint, they have an advantage over bond investments in that the bank can exercise a closer supervision over the affairs of a borrower than is practicable in the case of an issuer of bonds. Bank supervising and examining authorities, both Federal and State, have come to insist less upon short-term liquidity or marketability in bank assets, and have placed more emphasis upon assurance that loans will be ultimately paid in accordance with their terms. "Term loans" comply with the latter specification.

On the other hand, a bank cannot ordinarily liquidate a "term loan" before maturity and without recourse, as it can sell a bond. Nor is the "term loan" as suitable as a short-term loan for rediscounting at the Federal Reserve bank. A "term loan" may be safe enough as far as ultimate payment is concerned, but not sufficiently liquid for a commercial bank, because the bank must never lose sight of the prime necessity that it stand ready to meet the demands of its depositors for cash.

It must be admitted that most commercial banks have the personnel and organization required to investigate and pass upon "term loans" (at any rate, about as well as they now do in the case of short-term loans), and that the development of new financing institutions would therefore be, to some extent, a wasteful duplication of credit facilities. Nevertheless, the nature of commercial bank deposit liabilities is such that any great expansion of long-term commitments is bound to threaten the very solvency of the banks. It would seem that commercial banks should be cautious about making "term loans" in any substantial amounts until they can obtain "term deposits" of a duration more nearly approximating that of the loans to be made.

Questions for Study and Review

1. Indicate points of similarity and difference between the interests of depositors and stockholders in a bank.
2. How is the loan and investment policy of a bank affected by: (a) the character of its deposits; (b) the business cycle; (c) customers' demands?
3. Discuss the relative importance of self-liquidity and shiftability in the assets of a commercial bank.
4. List three types of loans which member banks are prohibited from making, and explain the reasons for such prohibitions.
5. What penalty is imposed upon national banks for usury?
6. State the various ways in which security loans may be restricted or regulated under Federal laws.
7. How are member banks restricted in making loans to affiliates?
8. Classify loans as to (a) maturity, (b) form, (c) borrowers, (d) purpose.
9. Explain and criticize "rotating" loans.
10. State the principal precautions which banks must take in making loans against: (a) bills of lading; (b) warehouse receipts, (c) trust receipts.
11. Compare security loans with commercial loans from the viewpoint of their desirability to the bank.
12. Explain and criticize term loans.

Problems

1. Assume the following items in the statement of a Pittsburgh national bank on June 29, 1940. capital, \$10,000,000; surplus, \$10,000,000; undivided profits, \$2,000,000; demand deposits of individuals, partnerships, and corporations, \$125,000,000; demand deposits of the United States, States, and municipalities, \$20,000,000; time deposits, \$75,000,000. Assign to each of the following items the amounts which you would consider appropriate reserve with Federal Reserve bank; stock of Federal Reserve bank; commercial loans; short-term, high-grade bonds; United States bonds; other bonds; mortgage loans.

2. Smith borrows \$100,000 from his bank for four months with interest at the rate of 6 per cent per annum, and leaves 20 per cent of the proceeds on deposit. Calculate the amount of interest or discount paid and the rate of interest or discount paid in relation to the amount of funds he actually receives for use in his business if the transaction takes the form of: (a) a straight loan; (b) a discount.

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CHAPTER 12

Credit Department

Present status of the credit department. Despite the great rise in the importance of bond investment in the operation of commercial banks, in most institutions the chief function remains that of making loans. The credit department does not extend credit, nor does it administer credit after it has been extended; yet, the credit department is closely connected with the credit function, its rôle being that of a facilitating agency in making loans. It gathers and compiles the information needed to weigh and appraise credits, although the actual decision as to the amount and terms of the credit granted is an administrative one made by the officers and directors of the bank.

The function of the credit department is to *investigate, collect, analyze, and make available complete information* on the credit standing of all those with whom the bank or its customers have dealings. Practice falls short of this theoretic function, as expense is a limiting factor. Obviously no bank could afford to maintain credit files on *all* the names about which customers might possibly inquire. The bank should, however, develop files on all of the more important companies and individuals in the area it serves, whether they are customers of the bank or not.

Services of the credit department. Specifically, the credit department serves, first, the directors and the lending officers; second, the other departments; and, last, the customers of the bank. On the basis of the information in the credit file, lines of credit and loan limits are established by the directors. Generally, the line of credit—which may be defined as *the amount that the bank is prepared*

to lend a particular borrower, together with the conditions and terms of the loans—is not set up until after the customer applies for accommodation.

There are exceptions, however, in cases such as the solicitation of a new account, where the banker may determine the line of credit in advance so that the promised loan accommodation may be made a part of the argument for the transfer of the account. Even in cases where a borrower voluntarily offers to transfer an account from another institution, it is a good idea, in order that future misunderstanding may be avoided, to determine in advance a line of credit for the account. The credit department must also work very closely with the new-business department so that undesirable accounts will not be solicited. This matter is quite important, since a great deal of ill will is created when a bank turns down an account after it has been solicited.

The credit files contain much information that would be of great value to the banker if it were statistically tabulated and studied. Even the largest banks have failed to utilize this mine of information which they have on the state of local trade. At present the well-managed credit department serves very well in following the activities of particular customers; but the material there available should be analyzed and used more fully by the officers and directors as a basis for policies and internal forecasting. Then, instead of having merely a general idea of the trend of an industry—or all industry, for that matter—the banker would have definite information on the trends in his own institution which could be measured against outside indices. This would enable the bank more easily to keep in step with industry and credit. Moreover, as everyone knows, the bank that does not keep in step does not last long.

Cost of the credit department. The direct costs of the credit department will depend, of course, on its size and the calibre of the employees. These direct costs can be easily calculated; that task is merely a matter of bookkeeping. But the full cost of the credit department is quite another matter. In this broad sense, the cost of the credit department includes losses of interest on loans which should have been recommended and were not; losses of principal on bad loans recommended to lending officers; and loss of goodwill and profit due to failure to appreciate fully the potentialities of certain businesses and lines of industry. The typical bank credit department is conducted on the theory that this department is the watchdog of the bank's credit. Often by the use of broader vision

and less resort to narrow deductions from accounting ratios, these negative costs of a credit department would be greatly reduced.

Because of the imponderables involved, it is likewise difficult to determine the value of a good credit department to the bank. The one certain way to determine what a good credit department is worth is to try to function without one. But no bank could afford the resulting charges against the income statement. That they would be several times greater than even the more expensive credit department costs will be generally conceded.

Organization of the credit department. The size and extent of organization of the credit department will naturally depend on the size of the bank and its policies. In the smaller, and even in many medium-size, banks, the directors generally prefer to let one officer assume full responsibility for the credit and loan functions. In such cases, the credit department's corporeal existence is often under one officer's hat, and might be described as little more than an attitude of mind on his part. Sometimes this officer can be induced to put on index cards his impressions of the credit standing of customers. If so, this practice constitutes an embryonic credit department of the modern type.

The credit department of the larger banks is far removed from the single card and hat mentioned in the preceding paragraph; yet the department is actually nothing more than a modification and elaboration of them. At best, a credit file is but a *substitute* for that personal contact which the smaller bank has with its customers. If this fundamental fact—that the credit department is, in the last analysis, only a substitute for the close, personal knowledge which the banker should have of the borrower—is not forgotten, it will clarify thinking and will aid in understanding the credit department.

The *investigation division*, as the name indicates, collects, by letter, telephone, and personal calls, the required information on the trade and the company or individual being investigated, hereafter referred to technically as the "name." Young college graduates are preferred by banks for the delicate work of outside investigation. Both skill and intelligence must be used in these investigations, or the credit standing of the name may be harmed, or even ruined in extreme cases. The very fact that the bank is making a credit investigation may start unfounded rumors detrimental to the credit standing of the company or the individual being "checked." A serious rumor may be started by a careless

question of the credit investigator to the trade—such as, “Is the company still slow in taking its discounts?” The investigator may be discharged, but the credit damage has been done. The bank must use only the employee with a more than usual share of personality and diplomacy in investigating work if resulting loss of business and goodwill is to be kept at a minimum.

The *compilation division* collates uniformly into files all material received from various sources. These files, or credit folders, are the special responsibility of this division. It is the duty of its employees to keep the credit files up to date and alive. They may also do analytical work on the material, although that function generally is left to the analysis division.

The *analysis division*, by analytical methods, reduces the data to comparable bases. Statements are checked, ratios are calculated, and other tests are applied by this group.

Because of the confidential nature and the necessity of instant availability of the credit files, they are kept by a specially trained *filing division*. Under no circumstances should these files be merged with the general files of the bank.

A *separate stenographic* division is also usually found in the large credit department. This practice has proved more satisfactory than the older one of using a central stenographic department, because a great deal of credit department work may be made practically automatic after the stenographers have had some training in the department.

The credit department may have, in addition, a *research division*, although the analysis division generally handles whatever research is undertaken. Likewise, commercial paper purchased for correspondents may be handled by a distinct group in the credit department.

Sources of credit information. The credit department seeks information from every conceivable source. Data are secured from all the regular sources, and also from quarters not generally available to the credit man in a business firm. The insistent demand of lending officers for more accurate and comprehensive credit information has forced the bank credit man continually to widen the scope of his investigation. Of course, the specific methods used will depend upon whether the name being investigated is a local, an out-of-town, or a foreign name, and upon the amount of information already available. In any event, both direct and indirect sources of information are utilized.

Most of the indirect sources readily suggest themselves. Obviously these sources—other banks, the “trade,” mercantile agencies, special agencies (such as Bishop’s), trade association interchange bureaus, and newspapers—all have valuable credit information. The difficulty lies in getting from these sources information that is unexpurgated and unbiased. Because of the liability involved, credit information is generally so emasculated or distorted that it is of comparatively little value to the bank. Such information does, however, serve to give leads which may be used by the bank in its direct investigation.

The *direct* sources of information are far more reliable. They include: officers of the bank who have direct knowledge of the “name,” special interviews by the bank’s credit investigators, records of the bank itself, and financial statements. These sources themselves indicate the credit information which can be secured from them. Two of them, however—interviews by credit investigators, and financial statements—are of such importance that they will be discussed further.

Work of the credit investigator. Formerly, banks waited for credit information to come to them; now, they send out to get it. Such an investigation is always made when loans are requested by a bank customer. For this purpose, banks use credit investigators, who run down all possible information on the prospective borrower.

The credit investigator first calls on the subject of the inquiry and, after explaining the reason for making the call at that particular time, requests the necessary information. Ordinarily this material is furnished without difficulty. During the interview, not only must the investigator secure adequate answers to certain questions, previously formulated at the bank, but he is supposed, in addition, to develop any leads to further information which may arise during the conversation.

After having interviewed the subject of the inquiry, and having thus become fully apprised of what is going on, the investigator proceeds to interview, in a similar fashion, trade creditors, competitors, and other banks which have the account. Too often this whole investigation is a purely routine matter, but there is no reason for its being that. An alert investigator should secure for the credit file information and an impression of the credit risk involved which should be invaluable to loan officers who do not have personal contact with the borrower.

Statement analysis. To determine credit standing, banks usually rely more heavily on statement analysis than on any other one thing. This may lead to unfortunate results. This criticism is not intended to deprecate the real value of statement analysis. Far from it. Such analysis may and does furnish valuable credit and economic information, but it is far from the "be all and end all" of credit analysis. To put it concisely, statement analysis should be viewed as a minor part of credit analysis, and by no means as synonymous with it.

After the Kreuger and Insull episodes, there appears to be no need of argument for audited statements; yet, because of the expense involved, banks have hesitated to insist that the statements of small firms be prepared by certified public accountants. Even the Federal Reserve authorities, who require member banks to have on file—as a prerequisite to rediscounting their paper at the Federal Reserve banks—statements from all borrowers of more than one thousand dollars, do not specify independently prepared statements.

There are, of course, audited statements and audited statements, their value depending to a great extent upon the character of the accountant's certificate attached and the standing of the accounting firm which prepared them. The nature and extent of the independent audit should be determined by the circumstances; but it would seem entirely proper (and it is the coming thing) for banks to demand at least some degree of independent preparation of financial statements of small as well as large concerns. Moreover, if the bankers do not on their own initiative require audited statements, the Federal Reserve Act or the National Bank Act may be amended to make them necessary.

Space does not permit a discussion of the principles of statement analysis, which forms a complete study in itself and is more properly taken up in a separate study of credit or of statement analysis.¹ The distinctly banking aspects of statement analysis, however, should and will be treated here.

Bank credit men have developed ratio and 100 per cent, or common-size, balance sheet analysis much further than other credit men. Likewise, bank credit men rely much more on comparative statement analysis than do other credit analysts.

¹ For a general discussion of the principles of credit, the reader is referred to the authoritative work: *Credit and Collection Principles and Practice*, by A. F. Chapin, McGraw-Hill Book Company, New York, 1925.

Various methods of ratio analysis—popularized by Alexander Wall, secretary of the Robert Morris Associates (an organization of bank credit men)—are also used extensively by banks. Most students are familiar with Wall's classification of ratios between various balance sheet and income account items into those that are *dynamic* and those that tend to be *static*. The more important of these ratios, set up for all borrowers in many banks, are of greatest use when difficulties threaten a borrower. In such cases, every possible ratio is calculated and compared with similar ratios over a period of years, so that the banker may determine, on the basis of the trends shown, whether to advance further credit or to take his loss immediately.

The common-size statement is also a convenient mechanism for measuring the figures of a company against those of others in the industry or against the norms previously established by the department. The common-size statement is prepared by dividing each item on the statement by the total. The result is the percentage relation of each figure on the statement to the total, or 100 per cent. The common-size statement may be compared directly and immediately with any other common-size statement. These common-size figures may also be posted to a form, such as the one illustrated on page 230, and compared with the statements of previous years.

While clerical time is required to prepare common-size statements, they do aid the loan executive in getting a quick picture of the situation. Such statements are undoubtedly not needed for all borrowing accounts, even in large banks, although they might well be used as a further check on selected accounts.

Some bank executives accord great weight to the various ratios set up in the credit department analysis, while others take their ratios *cum grano salis*. Some preposterous claims have been made for the value of ratios. A familiar one is that the ratios are infallible credit "barometers" when properly interpreted. Such a naïve qualification makes it impossible ever to attack successfully the fallibility of the ratios, at least as far as these over-enthusiastic sponsors of ratio analysis are concerned.

From the foregoing discussion, the reader may get the impression that it takes long hours to analyze the figures on a statement. On the contrary, it is quite a simple matter and is done rapidly after employees gain experience in the system used. Special columns on the original balance sheet are used to record a large part of the analysis. Where it is necessary to transfer the original figures to

ASSETS	Actual Figures			Common Size		Actual Figures			Common Size	
				Co.	Type				Co.	Type
Cash										
Receivables										
Inventory										
Listed Securities										
Miscellaneous										
Total Current										
Plant and Equipment										
Miscellaneous										
Total Fixed										
Total — For Credit										
Good Will										
Treasury Stock										
Total — Customer										

LIABILITIES

Payables										
Taxes										
Miscellaneous										
Total Current										
Funded										
Total Debt										
Reserves										
Capital Stock										
Surplus										
Total — Cap & Surp										
Good Will, Treas Stock										
Net Worth										
Total — For Credit										
Sales										
Net Profits										

RATIOS AND INDEX (Based on Group Figures)

	Wt	Co.	Base	Rel.	Value	Co	Base	Rel.	Value
Current									
Worth — Fixed									
Worth — Debt									
Sales — Rec									
Sales — Mdse									
Sales — Fixed									
Sales — Worth									
Profits — Worth									
Profits — Sales									
Index									

RATIOS AND INDEX (Based on Own Figures)

Current									
Worth — Fixed									
Worth — Debt									
Sales — Rec.									
Sales — Mdse.									
Sales — Fixed									
Sales — Worth									
Profits — Worth									
Profits — Sales									
Index									

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COMMON-SIZE STATEMENT

another form, such as a five-year comparative statement, typists make the transfer. The analysis division handles the actual computation of the ratios, and so on, with the aid of slide rules or electric calculating machines; ordinarily, less than ten minutes is necessary for each statement.

Bankers sometimes demand estimated future balance sheets and income statements from heavy borrowers. It is very easy for the borrower to submit these statements if his company maintains a complete budget system, as the estimate of future position of the company is an integral part of a good budget system. By checking performance with the statements submitted in advance, the banker gets a good line on the management of the borrower. These estimated statements should be used more widely by bankers, as their value in extending credit is apparent.

Credit file. The credit file is the banker's guide, record, and means of control on credit matters. It is not at all light reading, being sometimes tragic and always dramatic. Each credit file is the self-written drama of a business. On the basis of its physical divisions, the credit file must be discussed as a tangible thing; but it should be remembered that this file epitomizes the hopes and fears of a business—between the lines may be read the travail of human aspirations and, too often, of human failures.

The credit file may be subdivided on any convenient basis. Various factors, the chief being convenience of the officers, will condition its internal organization. There is no such thing as a standard credit file; however, to indicate the type of information ordinarily filed in the credit folder, one specific credit file, which might be considered as typical of a very large bank, will be described.

The first page, or *fly sheet*, is a recapitulation of the salient, or significant, information contained in the folder; this page includes a summary of such information as the line of credit, borrowing limits, guarantors or indorsers required, officer in charge of the account, and other data which it is imperative that everyone consulting the credit folder should see.

The completed *loan*, or *offering*, *tickets* are pasted in the next division of the credit file. Each of these tickets summarizes considerable active data on the account, as of the date the ticket was used for credit authorization. These completed offering tickets bear the initials of the different officers authorizing the use of por-

tions of the previously established line of credit, and thus indicate the officers currently familiar with the account.

The value of résumés of the significant credit facts involved in all loan transactions to date is obvious. The original statements and

DEPT _____		RATE _____	
OFFERING BY _____		ADDRESS _____	
AMOUNT \$ _____		CHARACTER OF LOAN _____	
STATEMENT OF TRUST RECEIPT FINANCING		OBTAIN AND FILE DO NOT OBTAIN <input type="checkbox"/>	BANK EXPENSE CUSTOMER'S EXPENSE <input type="checkbox"/>
MAXIMUM DIRECT LIABILITY LAST CALENDAR YEAR _____		GUARANTY _____	
DOMESTIC DISCOUNT DEPT _____		INTEREST ON BALANCE _____	
LOAN DEPT _____			
TOTAL LIABILITY AT ONE TIME _____			
OUT OF DEBT—DOMESTIC DISCOUNT DEPT _____		DISCOUNTS WHEN DUE _____	
OUT OF DEBT—LOAN DEPT _____		LAST RATE _____ DATE _____	
NOW OWING IN DOMESTIC DISCOUNT DEPT _____			
LIABILITY AS ENDORSER AND GUARANTOR _____		LOANS WHEN DUE _____	
PURCHASED PAPER _____			
NOW OWING IN LOAN DEPT _____			
LIABILITY IN DOMESTIC BRANCHES—\$25 000 AND OVER _____			
AVERAGE BALANCE PAST SIX MONTHS _____		LAST RATE _____ DATE _____	
SAME PERIOD LAST YEAR _____			
APPROVED _____		CREDIT DEPT. _____	
S F 147 S S		(OVER)	

EXISTING LIABILITY (FOREIGN)		ACTUAL LIABILITY		CONTINGENT LIABILITY	
FOREIGN OUTWARD BILLS DEPT	ADVANCES	\$			
	BILLS PURCHASED	\$			
COMMERCIAL CREDIT DEPT		\$			
LETTER OF CREDIT DEPT		\$			
SUSPENSE ITEMS		FUTURE EXCHANGE CONTRACTS			
AMOUNT OF CLAIM	ASSET VALUE	BOUGHT	SOLD		
\$	\$	\$	\$		
GUARANTEES					
ACCOUNT GUARANTEES		CLASS OF LIABILITY	AMT GUARANTEED	AMT AVAILED OF	
REMARKS:					
S L S					

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OFFERING TICKET

the statement analysis are set apart in the *financial statement section* of the credit file.

The material gathered by the credit investigators—such as interviews, trade reports, credit agency reports, and the experience of

other banks with the account—is segregated in a special division of the folder called the *information section*.

Letters inquiring as to the credit standing of the account are usually considered important enough to warrant a separate section. This *inquiry section* also lists all inquiries by telephone or in person. The inquiries themselves often throw a great deal of light on the credit standing of an account. Inquiry letters are kept in the folder together with carbon copies of the answers. Any other letters which are sent to the account and which bear on credit are also filed here.

Newspaper clippings and miscellaneous information are filed in the last, or *miscellaneous, section* of the folder.

Only a large bank would spend the money necessary to maintain credit files as elaborate and complete as the one described. However, even the smaller banks should maintain a credit file on their more important borrowers. It is certain that such files, if properly used, would pay their own way.

Revision of credit files. All files should be revised and brought up to date at least once a year. This annual revision should be just before, or immediately after, the period of heaviest loan accommodation. In addition, a special revision and check-up should be made the instant the bank hears of any unfavorable developments affecting the account.

Dissemination of credit information. Because of the legal liability involved, banks are extremely cautious in releasing credit information. They are fully liable for any credit information they release; if the information is not correct or if *certain legal formalities* are not observed, the banks may be sued by either the recipient of the information or the subject of the inquiry. Because of the financial responsibility of the banks, either party is quick to sue.

To minimize this danger, banks use only initials for firm names in all credit letters, in order to bring them into the category of “privileged communications.” In addition, banks often use non-liability paper, which contains a disclaimer of liability with respect to the recipient of the information. Since such disclaimers ordinarily cannot be maintained in court, they serve only to discourage suit on the part of those not familiar with their legal status.

The Robert Morris Associates, referred to before, has established a code of ethics for the interchange of credit information, particularly between banks. Institutions do not always live up to the spirit of the code; too much self-interest is at stake on the part of

the bank and the bank credit man. There is undoubtedly some justification for the attitude frequently met—namely, that much money and effort have been spent to collect the information and that, therefore, the bank should itself have the first use of it. By the time the bank has fully protected its own interests, the information divulged may be of little value to others.

Even if banks wished to hand out credit information freely, the danger of suit would deter them. Consequently, about the worst credit report a bank will release is to “damn with faint praise” Business men should realize this when they are consulting banks for credit information on a customer.

Relation of the credit department to other departments. The credit department is a service department for all other departments of the bank. Its facilities are at the disposal of *executives* in all other departments, as well as at the service of clerks in the more closely related departments. The foreign exchange, letter of credit, commercial credit, and bond departments find it necessary to consult the credit files or the members of the credit department many times daily.

Banks which have industrial service departments to advise and assist depositors in improving their business methods usually operate this service in conjunction with the credit department. In such cases, the credit department conducts special investigations and analyses for the industrial service executives. In fact, in the larger banks an engineer is often included on the staff of the credit department to investigate industrial management problems, such as efficiency and plant layout.

The credit department is so closely related to the loan, new-business, and commercial paper purchase functions that these will now be discussed separately.

Relation of the credit department to loans. Since the credit department is little more than a functionalization and specialization of part of the work of the loan officers, a close relationship to these officers is a foregone conclusion. No loan officer would attempt to “talk business” to a customer without the aid of the credit file. In fact, no executive action of any consequence is taken before the credit folder of the depositor involved has been consulted.

Loans are made and lines of credit established on the basis of the analyses and data of the credit department. The credit men indicate their opinion, favorable or unfavorable, on the salient points

of the financial affairs of each loan applicant. Ordinarily, recommendation as to the specific line of credit to be granted each customer is left to the loan officer; yet the comments and opinions of the credit experts practically determine what even that recommendation shall be. It is evident that no loan officer should fail to give weight to the credit department conclusions, since his decision should be reached by the same methods of investigation, analysis, and judgment. The loan officer's chief contribution to credit granting is the exercise of a more mature and broader judgment than is generally possessed by the members of the credit department.

The loan officers should be considered senior members of the credit department, whose duties are to maintain contact with the depositors and to pass on the more advanced phases of the credit work of the bank. In this respect, especially in smaller banks, it is often impossible to draw a line of demarcation between the work of the credit department and that of the loan officers. Even in larger institutions this division of responsibility for credit conclusions varies widely.

The recent tendency has been toward further merging of the work of analysis and lending. Credit department executives are listened to far more sympathetically than in the past. Moreover, loan officers are reviewing and improving their knowledge of statement analysis and credit barometrics.

Credit department and new business. The credit department is a veritable gold mine of new business for those bankers who are intelligent and energetic enough to use its great store of business information.

Modern bankers spend their spare moments looking for sound borrowers, instead of merely practicing several different ways to say "no" without offending. Competition, regulation, and low interest rates fostered by government intervention force bankers to cultivate and develop every opportunity to lend money safely and profitably. The credit department is an almost virgin field for such efforts.

Many large banks keep careful records of the particular bank departments utilized by each customer, and then try to get customers to take advantage of the services offered by other departments. For example, customers receiving payments from trust funds are urged to open checking accounts; the services of the domestic banking departments are called to the attention of customers

patronizing only the foreign department; and so on. This sort of effort usually means that customers are induced to use other *service* departments, from which only nominal profits may be derived at best. This road should be followed further, via the credit department, to the real banking goal—a borrowing customer.

A competent and conscientious study of the credit files will reveal many ways in which customers can use additional credit, with profit to themselves and the bank. Obviously this is no job for a credit clerk; rather, it calls for a real banker with business insight and a considerable amount of vision. Suggestions as to the use of additional credit or the utilization of different financing methods in the customer's business, with a consequent lowering of interest cost per dollar of business done, create goodwill which nothing can efface, *and profits* for the bank. Additional credit for such carefully selected customers ordinarily increases their rate of growth, and likewise increases the deposits of the bank.

Credit files are rich in leads to entirely new business. These files contain all sorts of information on affiliates and associated companies. Considerable detail is usually given on the financial interests involved in each company. Financial and physical intercorporate relationships are shown. Much confidential information not otherwise available is at the disposal of the banker if he will but consult credit files. From a study of these files the banker learns whom to approach and when. The files give him an inside track in soliciting new business, as he can determine in advance what is needed and can plan how to make his offer to the prospective customer.

One large metropolitan institution has more than 100,000 credit files on "names" that are not customers of the bank. The same situation holds, in less degree of course, for nearly all banks. These "names" are practically all potential customers. Yet banks advertise for leads!

Relation of the credit department to the new-business department. Few banks have a separately organized new-business department. The close connection between such effort, whether separately constituted or not, and the credit department has been indicated in the preceding paragraphs. In any credit department worthy of the name, there should be a separate division to investigate and check the credit standing of prospective customers. This ~~division~~—functionally, if not actually—should also be a part of the new-business department.

In banks where all new-business effort is centered in the officers, the credit department performs even more new-business functions.

Outside credit investigators should be on the alert for opportunities to increase the bank's business. Likewise, new-business men gather a great deal of valuable credit information in their contacts with prospects. Such information must be interchanged; close coöperation is an absolute necessity, regardless of the departmentization involved. New-day competition requires all this, and more, if the bank is to make the most of its lending business.

The potentialities of the credit department in regard to new business may be likened to the present profitable exploitation—by modern smelting and refining methods—of the mining wastes (tailings) of previous operations. The dormant opportunities buried in the credit files could well be neglected in the days of American expansion, when credit could be employed profitably on every hand. But nowadays these opportunities must be resurrected, as banks cannot afford to overlook any possibility which promises a single cent of net profit.

Purchase of commercial paper for correspondents. An important part of the credit department's job in large banks is checking the names offered on open-market commercial paper. The credit department handles this work for the bank and also, as part of its service, for the bank's correspondents.

Thus, lists of "names" are submitted by commercial paper brokers (dealers); or the paper is bought on a ten-day option basis, and credit reports on each name are furnished to the correspondent bank. Selection is made by the correspondent, using the credit checking as a guide. The commercial paper division then either purchases the selected paper or returns the rejected paper, if purchase was on an option basis, and completes the transaction accordingly.

This work is so heavy in the larger metropolitan banks that a separate division of the credit department is set up to handle it exclusively.

Group and branch bank credits. This chapter would not be complete without some reference to the credit methods necessitated by the recent growth of group and branch banking. Even though the internal organization and credit methods vary widely, particularly in group banking, certain practices are typical.

The individual banks in a group are operated as distinct institutions; consequently they handle credits just about as do the unit

banks. In addition, however, the credits of the individual banks are subjected to a more or less general supervision by the dominant bank of the group or the holding corporation.

Applications for credit lines in excess of the legal limit for a member of the group are usually referred directly to a larger member of the group. The loan applicant thenceforward deals with the larger bank, which is in a position legally and financially to accommodate him. On rare occasions the original bank, without advising the borrower of this action, will take action to divide the excess loan with other members of the group. This method tends to preserve the local prestige of the original institution. It is apparent that important refinements in credit control methods must be evolved for this type of commercial banking.

In branch banking, managers are permitted to lend small amounts on their own responsibility; these loans are subject, of course, to the general supervision as to policy by the head office. In smaller branches, the manager's discretionary loan limit may be as low as \$500, but \$1,000 would probably be a fairer average limit. In the larger branches, this limit may be increased to \$10,000 and, in some few cases, to any amount for which the manager is willing to assume loan responsibility. Little difficulty has been experienced with managers' exceeding their discretionary limits; on the contrary, the problem is to get them to lend even small amounts on their own responsibility without "passing the buck" to the head office. All lines above the discretionary limit must, however, be referred for approval, before credit is granted, to the credit department and to the loan officers in the head office.

Branches generally maintain no credit files. All of their applications and information are forwarded to the head office. By this method, centralization of credit control and accurate central liability records are secured.

Future of the credit department. After this recital of the importance of a credit organization in a modern bank, it is hard to realize that there were no separately organized credit departments before 1890. Their growth has taken place almost entirely in the twentieth century. They have grown both extensively and intensively—that is, more and more banks have added separate credit departments as such, and their methods have become more thorough and exhaustive. They have not prevented bank failures, nor have they eliminated losses. Yet it is only fair to say that far more

losses have occurred through disregarding their recommendations than through following them.

Investment analysis. Banks, generally, rely on outside agencies for their security ratings. The regulations prescribed by the Comptroller of the Currency for the purchase of investment securities by national banks have been interpreted by some as permitting the purchase of only those bonds which have received high ratings from the standard rating agencies. While the Comptroller has denied that such is the import of the regulations, the interpretation is indicative of the reliance on rating services.

Determination of which rated security to buy is usually made by an officer of the bank who, as the case may be, may or may not have the assistance of a security analyst. Trust companies and many banks maintain a special group of these long-term credit analysts to handle their investments and advise depositors. Ordinarily, this group is separately constituted from the credit department. Long-term credit analysis techniques, and even principles, vary considerably from those employed in short-term credit work.

It should be understood that security analysis, wherever done, is complementary to the work of the credit department. It is just as important to make good investments as it is to make good loans, if losses are to be kept at a minimum. Every reasonable precaution should be taken in both instances.

Questions for Study and Review

1. Why is the credit department considered of such great importance?
2. Give the function of the credit department.
3. Specifically, how does the credit department serve the loan officers of a bank? the customers?
4. How may the credit department coöperate with the new-business department?
5. Indicate the work of *each* division of the credit department.
6. List the direct sources of bank credit information; the indirect sources.
7. Describe the duties of the credit investigator.
8. What can the banker learn by statement analysis?
9. Does the common-size comparative statement offer any advantages over the ordinary comparative statement? Discuss.
10. List the uses to which credit folders are put.
11. How do banks avoid liability for divulging credit information?

Problems

1 Given the following financial data on Waterproof Woolens Manufacturing Corporation as of January 1.

<i>Current Assets</i>	<i>1942</i>	<i>1941</i>
Cash	\$ 20,000	\$ 100,000
Accounts Receivable	650,000	500,000
Inventory	500,000	400,000
	<hr/>	<hr/>
	\$1,170,000	\$1,000,000
 <i>Current Liabilities</i>		
Notes Payable	\$ 20,000	\$ 90,000
Accounts Payable	500,000	350,000
Wages, taxes, and other accrued current obligations	80,000	60,000
	<hr/>	<hr/>
	\$ 600,000	\$ 500,000

Net profit 1941, \$70,000; Average balance last 6 months of year 1940, \$100,000, 1941, \$50,000

(a) Which changes in these figures would the banker consider favorable ones? Unfavorable ones?

(b) If all other factors were standard for the industry, and satisfactory to the banker, estimate the maximum line of credit he would authorize on a 90-day unsecured basis

2. Factors, Inc., write that they have heard of certain unfavorable developments regarding Waterproof Woolens Manufacturing Corporation and ask for an immediate credit report. Draft a short reply which will cover the situation and avoid liability.

3 Set up comparative common-size statements for assets and liabilities only for the first year and last year of American Gadgets, Inc., shown in the balance sheets given in Chapter XV.

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R. R.

CHAPTER 13

Bank Investments

Rôle of investments. The traditional view of banking, largely developed in Great Britain during the course of the eighteenth and nineteenth centuries, looked upon a commercial bank as a source of circulating, or working, capital for the business man. As a result, the bank's chief asset was held properly to consist of short-term loans of the variety now usually referred to as "commercial," while the major liability consisted of demand deposits.

The history of American banking indicates that from its early days banks here have sought to place a large part of their funds in commitments other than commercial loans. In particular, they have made loans on mortgages to facilitate the development of agriculture and of urban real estate, and they have bought bonds of governments and corporations.

The acquisition of these less liquid assets in the past has been explained and defended, in the face of criticism from conservative critics, on two grounds.

In the first place, banks in this country, especially in localities where no mutual savings banks are found, have received substantial volumes of time deposits, not payable immediately on demand; and it has been contended that such deposits may properly be invested in less liquid commitments. Since such depositors desire to place their money for longer periods with the bank, the argument ran, the latter is justified in investing such funds in investment securities and mortgages that do not mature and require cash payment within a short period of time.

The second argument in favor of bank investments, which applied especially to the purchase of government and corporation

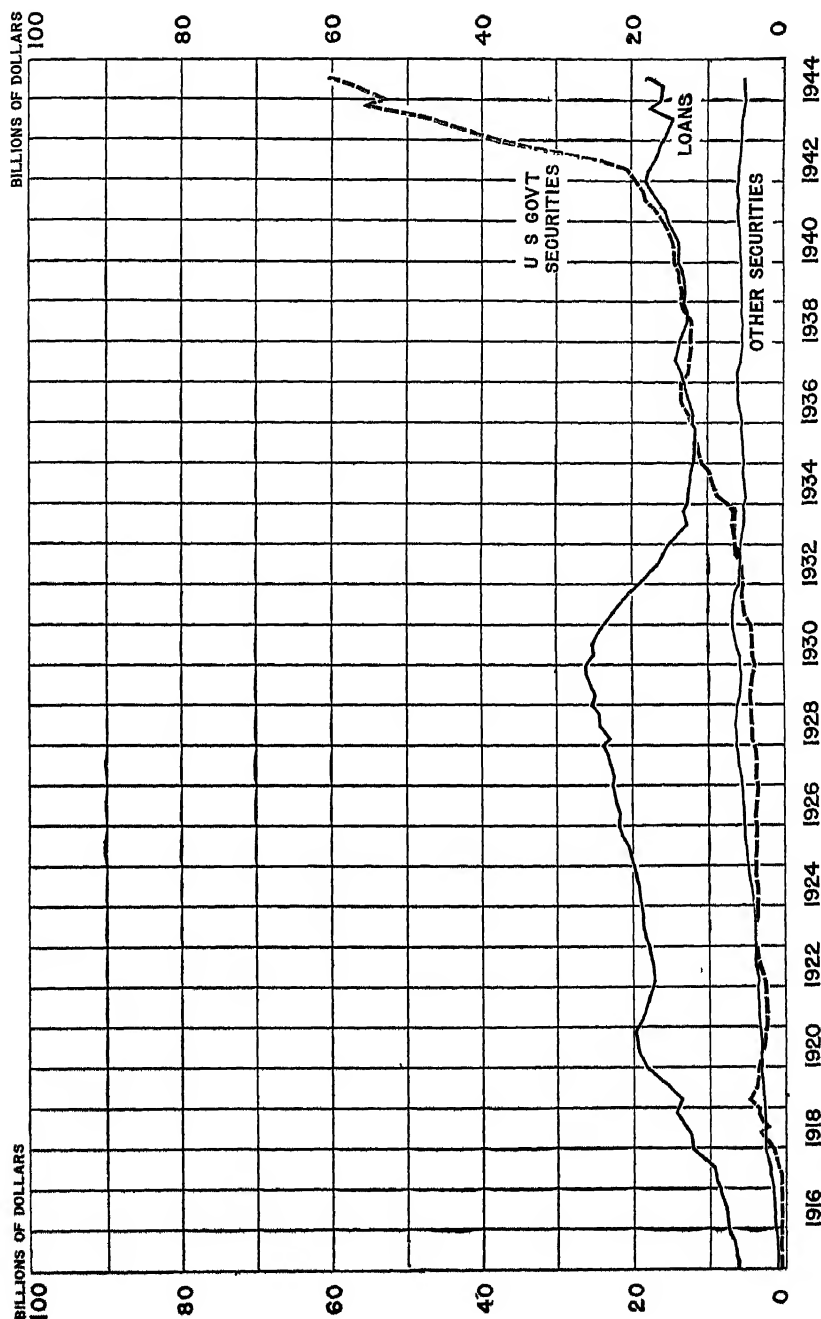
bonds, has been that such assets, even if they do not have the quality of liquidity and are not automatically paid off within a short period of time, do have the quality of marketability, or "shiftability." This means that these assets can be sold, and so shifted to some other holder, and the bank thereby would obtain the cash proceeds to repay depositors if it should face the threat of heavy withdrawals. The evolution of our security markets into great exchanges of nation-wide and even world-wide scope, it has been claimed, has justified investment—even of deposits of a bank which are repayable on demand—in readily marketable securities.

Experience during major panics and depressions, particularly that of 1930-1933, has given repeated blows to the "shiftability" theory of commercial banking, and has tended at least to refute the contention that marketability is the equivalent of true liquidity in banking assets. Such experience has shown that long-term securities are subject to the risk of severe price declines, and that marketability may be impaired when there is a general rush to liquidate and little buying power available.

Nevertheless, investment in securities has been an ever more important feature of commercial bank operation in the United States. In fact, it has never been so important as it is today, when government obligations constitute much the largest part of a bank's earning assets. It is true that in some countries abroad efforts have been made to separate commercial banking entirely from investment in any but government securities. The regulation of bank security investments in the United States has been far less drastic, but holdings of Government securities are several times as large as all other investments combined.

History of bank investments. Early banking experience in this country was not favorable to the placement of any large proportion of the assets of a commercial bank in long-term securities. Perhaps the most notable instance of how acquisition of large blocks of securities proved disastrous to a bank was the failure of the second Bank of the United States in 1841, after it became a state-chartered institution in Pennsylvania. This experience and other similar ones resulted, in several commonwealths, in the passage of state laws barring bank purchases of bonds.

The National Bank Act of 1863 provided for bank purchases of United States Government bonds to be used as security for circulating notes, but not for investment in other types of securities. However, under a later opinion of the Comptroller of the Currency,



BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

LOANS AND INVESTMENTS OF MEMBER BANKS IN THE UNITED STATES, 1916 TO 1944

national banks did obtain the authority to purchase bonds for investment without specific legislative authorization. Section 5136 of the Revised Statutes, part of the National Bank Act, permits the discount and negotiation of "promissory notes, drafts, bills of exchange, and *other evidences of debt*." The last four words of this provision were interpreted by the Comptroller as permitting investment in bonds, but a long line of court decisions has held that a bank may not make an investment in stock, except such as is specifically authorized by statute.

State laws governing bank investments now vary a good deal. Investment in bonds is permitted in every state, but many states prohibit the purchase of stocks. New York State bars, to state banks, investment in stocks, with the usual exception of shares in safe-deposit subsidiaries, the Federal Reserve bank, and other such special cases. No similar prohibition, however, applies to trust companies chartered in that state.

Specific statutory authorization to purchase bonds for investment was given to national banks, for the first time, in an Act of February 25, 1927. This measure permitted national banks to invest in "bonds, notes, or debentures commonly known as investment securities, under such further definition of the term 'investment securities' as may by regulation be prescribed by the Comptroller of the Currency." The Comptroller ruled that only marketable obligations may be purchased by the banks. In defining the term *marketable*, however, he adopted a generous attitude. He stated: "Under ordinary circumstances, the term 'marketable' means that the security in question has such a market as to render sales at intrinsic values readily possible."

Banking Act of 1933. The heavy losses from security investments suffered by most banks during the 1930-32 depression period, and the general belief that excessive purchases of securities by the banks contributed to the inflationary boom of the preceding years, led to new legislation. The Banking Act of 1933 was designed, in large measure, to curtail the participation of commercial banks in investment banking activity. This end was sought chiefly through the imposition of restrictions on bank investments. These restrictions, which were made applicable to all members of the Federal Reserve System, may be summarized as follows:

(1) Banks were prohibited from underwriting new issues of securities. This provision barred banks from participating in the wholesaling of security issues. A number of institutions formerly

had underwritten new issues, taking into their own portfolios whatever portion of the offering was not purchased by other investors. This provision remains in effect.

(2) A member bank was not to purchase more than 10 per cent of any one issue of securities in which the total issue exceeded \$100,000 in amount, or 50 per cent of the bank's capital. This provision was designed to assure greater diversification in bank investments for the future.

(3) A bank was not to invest more than 15 per cent of its capital and 25 per cent of its surplus in the securities of any one obligor. Here, also, increased diversification was the objective.

(4) Investment by a bank in a corporation organized to carry on the safe-deposit business was limited to 15 per cent of the bank's capital and surplus. This provision has not been changed.

(5) A bank was not to invest, directly or indirectly, in its premises more than the amount of its capital stock, unless approval to invest a larger amount was given by the Comptroller of the Currency to national banks, and by the Federal Reserve Board to state-chartered member banks. This also remains effective.

The restrictions on bank investments have not been applicable, however, to bank purchases or underwriting of Government, state, or municipal bonds; to obligations issued under the Federal Farm Loan Act; or to issues of the Federal home loan banks, the Federal Farm Mortgage Corporation, and the Home Owners' Loan Corporation. Member banks have continued to engage freely in the origination and distribution of Federal, state, and municipal bonds, since the provisions of the Banking Act of 1933 went into effect. However, where banks join in underwriting syndicates for such issues, these banks are subject to special supervision by the Federal Reserve banks, and answers to questionnaires must be filed by the officers and directors of the banks in such cases. This is designed to make effective the provisions of the law barring the operation of bank security affiliates.

This law further provided that state member banks were to be subject to the same limitations and conditions with respect to the purchase, sale, underwriting, and holding of investment securities and stocks as are applicable to national banks. Thus, if more banks are brought into the Federal Reserve System, this provision will make it possible to establish uniform regulation of bank investments throughout the country.

Banking Act of 1935. The comparatively narrow restrictions on individual bank investments contained in the Banking Act of 1933, designed to achieve a desirable degree of diversification in bank portfolios, proved too rigid. In the Banking Act of 1935, enacted only two years later, the limitation on the proportion of any one issue of securities that a bank could buy was removed. Instead, the new act substituted a single limitation that the securities "of any one obligor or maker" could not be purchased to an amount in excess of 10 per cent of its capital and unimpaired surplus. Thus, diversification was assured, but the bank could buy an entire issue of bonds if it were so minded, as long as the amount was within 10 per cent of its capital and surplus.

The chief effect of the enactment of the Banking Act of 1935, however, was the drastic revision of the regulations of the Comptroller of the Currency applicable to bank bond investments that was effected under it. The Regulation of February 15, 1936, for the first time sought to establish effective qualitative as well as quantitative standards for bank bond investments. As subsequently amended in 1938, to reduce the emphasis upon marketability contained in earlier regulations, the Investment Securities Regulation of the Comptroller limited member bank bond purchases as follows:

An obligation of indebtedness which may be purchased for its own account by a national bank or State member bank of the Federal Reserve System, in order to come within the classification of "investment securities" within the meaning of paragraph Seventh of said Section 5136, must be a marketable obligation, i.e., it must be salable under ordinary circumstances with reasonable promptness at a fair value; and with respect to the particular security, there must be present one or more of the following characteristics:

- (a) A public distribution of the securities must have been provided for or made in a manner to protect or insure the marketability of the issue; or,
- (b) Other existing securities of the obligor must have such a public distribution as to protect or insure the marketability of the issue under consideration; or,
- (c) In the case of investment securities for which a public distribution as set forth in (a) or (b) above can not be so provided, or so made, and which are issued by established commercial or industrial businesses or enterprises, that can demonstrate the ability to service such securities, the debt evidenced thereby must mature not later than ten years after the date of issuance of the security and must be of such sound value or so secured as reasonably to assure its payment; and such securities must, by their terms, provide for the amortization of the debt evidenced thereby so that at least 75 per cent of the principal will be extinguished by the maturity date by substantial periodic payments: Provided, That no amortization

need be required for the period of the first year after the date of issuance of such securities

(2) Where the security is issued under a trust agreement, the agreement must provide for a trustee independent of the obligor, and such trustee must be a bank or trust company

(3) All purchases of investment securities by national and State member banks for their own account must be of securities "in the form of bonds, notes, and/or debentures, commonly known as investment securities", and every transaction which is in fact such a purchase must, regardless of its form, comply with this regulation.

Special provision is made, it will be noted, for investment in bonds that do not enjoy a public market, where an adequate sinking fund gives assurance of repayment.

But the Comptroller went much further, in laying down regulations to govern member bank investments, than merely to define marketability and to specify other standards where marketability does not exist. He laid down eight additional rules to govern bank investments as follows:

(1) Although the bank is permitted to purchase "investment securities" for its own account for purposes of investment under the provisions of R. S. 5136 and this regulation, the bank is not permitted otherwise to participate as a principal in the marketing of securities.

(2) The statutory limitation on the amount of the investment securities of any one obligor or maker which may be held by the bank is to be determined on the basis of the par or face value of the securities, and not on their market value.

(3) The purchase of "investment securities" in which the investment characteristics are distinctly or predominantly speculative, or the purchase of securities which are in default, either as to principal or interest, is prohibited.

(4) Purchase of an "investment security" at a price exceeding par is prohibited, unless the bank shall—

(a) Provide for the regular amortization of the premium paid so that the premium shall be entirely extinguished at or before the maturity of the security and the security (including premium) shall at no intervening date be carried at an amount in excess of that at which the obligor may legally redeem such security; or

(b) Set up a reserve account in order to amortize the premium, said account to be credited periodically with an amount not less than the amount required for amortization under (a) above.

(5) Purchase of securities convertible into stock at the option of the issuer is prohibited.

(6) Purchase of securities convertible into stock at the option of the holder or with stock purchase warrants attached is prohibited if the price paid for such security is in excess of the investment value of the security itself, considered independently of the stock purchase warrants or conversion feature. If it is apparent that the price paid for an otherwise eligible security fairly reflects the investment value of the security itself and does not include any speculative value based upon the presence of a stock purchase warrant or conversion option the purchase of such a security is not prohibited.

There were two other rules regulating repurchase agreements covering securities.

By far and away the most important of these rules was (3) above, which bars from the list of investments eligible for bank investment securities "predominantly speculative." What criteria were to be used in passing upon individual issues and groups of bonds? Who would decide which security was speculative? These were but a few of the questions that were asked.

The Comptroller's regulation of 1936 did contain a very significant footnote to rule (3), which read:

"The terms employed herein may be found in recognized rating manuals, and where there is doubt as to the eligibility of a security for purchase, such eligibility must be supported by not less than two rating manuals"

Since there were four recognized rating services at the time that the Regulation appeared, Standard Statistics, Moody, Poor, and Fitch, this footnote meant in effect that two out of the four would have to agree that a given bond was not speculative. The authorities thus gave official cognizance to the rating agencies, despite the fact they were not themselves under regulation and were free to set up any standards they pleased. The rating agencies themselves hesitated to assert which ratings made a bond "predominantly speculative" and which did not. Accordingly, larger banks adopted the policy of analyzing each issue themselves, and thus deciding whether or not it could be defended as non-speculative. However, a good deal of experience will doubtless be necessary before reasonable and equitable rules can be promulgated and officially interpreted to carry out the intent of the regulations that banks restrict their purchases to bonds of relatively high investment quality.

This has been fully recognized by the Comptroller of the Currency. An address delivered by the Comptroller shortly after the Regulation was promulgated stated:

As is inevitable in the matter of regulations, questions of interpretation arise from time to time. While there has been unanimous approval of the objective toward which these regulations are directed, a committee of the American Bankers Association has suggested that some of their members desire to have clarified certain aspects of the regulations

Inquiry has been made as to whether member banks are confined to the purchase of securities which have a rating classification in one of the four groups according to rating services. The responsibility for proper investment of bank funds, now, as in the past, rests with the directors of the institution, and there has been and is no intention on the part of this office to delegate this responsi-

bility to the rating services, or in any way to intimate that this responsibility may be considered as having been fully performed by the mere ascertaining that a particular security falls within a particular rating classification.

Reference to the rating manuals was made in the regulation in recognition of the fact that many banking institutions, by reason of lack of experienced personnel and access to original sources, are unable personally to investigate the background, history and prospects of a particular issuer of securities, and consequently must rely to some extent upon such information as has been compiled by various rating services in their large rating manuals. It may also be expected that banking institutions will desire to supplement their own judgment by checking it against the opinion of others, including ratings that have been given by rating services. Such ratings, however, regardless of whether or not they are in the first four groups, are not conclusive on the question of eligibility. It is recognized that some securities, which are entirely eligible from a non-speculative standpoint at the time they are available for purchase, may have as yet received no rating by the rating services. It is also recognized that a security with a high rating according to the services may, in the circumstances of a particular case, be an undesirable investment, whereas on the other hand, conditions existing at the time of investment may make a security entirely eligible, notwithstanding the fact that it has a comparatively low rating according to the standard rating services. In the latter type of case, of course, there will be a correspondingly greater burden upon the bank to satisfy the examiners that a particular security is in fact eligible from a non-speculative standpoint.

Paragraph (5) in section II of the regulations prohibits the purchase of securities convertible into stock at the option of the issuer. In this connection question has been raised as to purchase of securities accompanied by stock purchase warrants or rights. It is unnecessary to remind you gentlemen of the prohibition against banks investing in stocks. The statement quoted a few moments ago relative to the danger of investment in convertible bonds equally applies to securities carrying stock purchase rights. They are speculations—and in addition to being objectionable as such, they in effect constitute a prohibited investment in stocks because the price paid by the bank involves a premium which in part reflects the conjectural value of the stock right, and such purchase is to that extent not a purchase of an investment security. Inasmuch as the bank is prohibited by law from exercising the purchase warrant after it has been acquired, such portion of the bank funds as are allocable to the original purchase of the warrant, would have been expended on no justifiable basis under the law.

Some banks have misunderstood the amortization requirements of the regulations as respects securities purchased at a price exceeding par. It should be made clear that the premium need only be gradually amortized at regular intervals over the life of a security to the end that at its maturity the security will not be carried at an amount in excess of par. If the security is callable at a given price above par, the rate of amortization will have to be such as to have gradually extinguished the premium down to call price by the call date, regardless of whether the security is in fact called on that date. Thereafter, if not called, amortization shall continue from that point to maturity on the same basis as though the security had been purchased on the call date at the call price.

It is clear, however, that the effect of the Comptroller's regulation will be to raise the average quality of bank security portfolios to a considerable degree, and bar for member banks speculative in-

vestment policies that were not uncommon in the past. The Commission on Banking Law and Practice of the Association of Reserve City Bankers had the following strictures to make on the past investment policies of banks:

The disastrous period of bank liquidations is getting further and further behind us and it is probable that even bankers are becoming somewhat forgetful of the true causes of the trouble, although at one time there would have been little disagreement as to the factors involved. Most of the public, unfortunately, never knew fully the causes of our banking troubles because the facts were not available to them, and they might be easily convinced that the whole trouble can be charged to so simple a thing as strict eligibility requirements.

It is contended that a study of the assets of failed banks would completely dispel the view that the troubles of these banks were due chiefly to a lack of borrowing power. No one can peruse the facts without arriving at the absolute conviction that the troubles of the banks were due in considerable part to assets which should never have been in the banks at any time, under any condition. In the years prior to the depressions of both 1921 and 1929 the banks became involved in the speculative fever of the age, and many of them filled their portfolios with assets which were bound to show losses with the turn of the economic tide. No artificial methods of liquidity and no attempt to have the Federal Reserve System hold up the inflated balloon could possibly have avoided the ultimate consequences.

It may be of interest at this point to present a few simple facts which were revealed by a detailed analysis of the assets of failed banks. Of the banks failing in 1931, 105 were picked at random from all sections of the country, and the 50 bonds contributing the greatest depreciation to the portfolios of the 105 banks were listed and tabulated. The two bonds which contributed the greatest depreciation to the portfolios of this group were convertible bonds which had been bought at prices substantially above par. In other words, they were speculations. There were several other convertible bonds in the list which also caused heavy losses. Of the first 50 bonds in point of depreciation, only five had ratings of the first three grades in 1929; four of these five were convertible issues in which the banks' losses were due to having bought them at too high a price. The remainder of the issues were of the fourth grade or lower. These banks were sacrificing security for high yield. Only four of the 50 issues were brought out before 1923 and 43 per cent of them were brought out in 1928 or later. In other words, the bonds causing the greatest amount of depreciation were unseasoned issues, largely the product of boom conditions in the bond market.

The net effect of the Regulation, and of the great expansion of the national debt in recent years, has been to limit bank purchases of corporate securities and concentrate their investments mainly in United States government obligations.

Evaluation of investments. Quotations on most of the investments of commercial banks may be readily obtained from the usual tables of stock exchange and over-the-counter market prices. Nevertheless, the evaluation of these portfolios raises for the banks and their customers a number of vital and interesting questions.

Before the 1930-1933 depression most banks carried their bonds at cost, with an allowance for amortization of premiums above par. In special cases, especially where a default or a sweeping decline in market price had occurred, a reserve might be set up from earnings, or the bond might be written down directly, with a corresponding deduction made from undivided profits or reserves for contingencies. In making up a report upon the status of the institution in question, examiners of the Federal or state regulatory authorities, the local clearing house, or the Federal Reserve bank would frequently mark down bonds in instances where quite substantial declines in market price had occurred.

It early became evident, during the period of sweeping declines in bond prices after 1930, that a wholesale closing of banks would be necessary if the market quotations of bonds were taken by examiners to determine whether or not the capital of the institution had become impaired.

In September, 1931, therefore, the Comptroller of the Currency sought to base the valuation of bond investments upon an "intrinsic value," as against a market value, basis. Bonds were to be graded, he ordered, on the basis of the lowest rating given each issue by four leading statistical agencies. The four highest grades of bonds, as thus classified, were valued at cost, with an allowance for amortization of premium or discount, regardless of market price. Other issues were to be written down to market by a charge against earnings of 25 per cent of the depreciation semi-annually. Defaulted bonds were to be written down to market quotations immediately.

The Comptroller's Investment Securities Regulation of July 1, 1938, provided for a permanent system of appraisal of bond investments in bank examinations. Securities are to be divided into four groups. Group I includes "marketable obligations in which the investment characteristics are not distinctly or predominantly speculative. The group includes general market obligations in the four highest grades and unrated securities of equivalent value." Such issues are to be included without allowance for either appreciation or depreciation, except for amortization of premiums above par paid for them.

Group II comprises securities "in which the investment characteristics are distinctly or predominantly speculative. This group includes general market obligations in grades below the four highest, and unrated securities of equivalent value." Such issues are to be valued at the average market price for eighteen months just

preceding examination, and 50 per cent of the net depreciation is to be deducted in computing the net sound capital of the bank, which is the primary objective of the examination. By taking only half the depreciation, the possibilities of a subsequent recovery in price is provided for.

Group III, comprising securities in default, and Group IV, consisting of stocks, are to be written down to market, the entire depreciation being considered a loss.

(At the end of 1938, the insured commercial banks of the country reported that 87.6 per cent of their security holdings were in Group I. These comprised 48.2 per cent in Federal Government bonds, 20.6 per cent in other governmental obligations, 10.7 per cent in better-grade corporate bonds, and 8.1 per cent in "borderline" bonds. Investments in Groups II, III, and IV amounted to 13.6 per cent of the total)

Profits from securities. The Investment Securities Regulation of the Comptroller of the Currency also regulates the manner in which member banks may handle profits and losses from the sale of investment securities.

Profits realized from the sale of bonds may not be used for any purpose except writing off security losses and establishing adequate reserves for future losses, if these remain to be taken care of. Bank examiners are expected to back up this policy of earmarking investment profits to absorb realized or prospective losses by encouraging the establishment and maintenance of adequate reserves and criticizing speculative investment policies on the part of the banks.

Published bank condition statements, however, may show the bond portfolio on the basis of cost. As a result, an examiner's report on a bank and the published statement of condition often vary considerably. Many a bank has a substantial "hidden asset" in the shape of a bond portfolio worth considerably more than book value.

Rediscounting of investments. An effort further to reduce the risks inherent in bank purchases of long-term securities has been made in several countries through granting to such holdings the rediscount privilege at the central bank. In several European central banks, securities may, under certain stated conditions, be put up as collateral for advances to individual banks. These advances are referred to as "Lombard loans," to distinguish them from the discounting of ordinary bills and commercial paper.

The Federal Reserve Act did not originally provide for advances, secured by securities, to member banks. However, under the so-called "War Amendments," passed in 1917 and never repealed, member banks were permitted to obtain advances from the Federal Reserve banks on the security of Federal Government obligations, which were considered for this purpose to be worth par at all times. As a result, a virtual premium has been placed on the investment of bank funds in Treasury obligations, and the market for such securities thus broadened to a large extent. This move was similar in character to, but much more far-reaching in effect than, the provision of the original National Bank Act of 1863, which permitted national banks to issue currency on the security of the Federal Government bonds which they purchased and deposited for the purpose at Washington with the Comptroller of the Currency.

The Emergency Banking Act of 1933 permitted the Federal Reserve banks to lend to members, for a time, on any assets. The broadening of "Lombard loan" privileges on a permanent basis, to permit advances secured by other securities than bonds of the Federal Government and Federal agencies, was made a permanent feature of the law only in 1935, and, as has been seen, a penalty rate was imposed on such advances.

Investments and earnings. Although the aggregate of investments of all commercial banks has surpassed the total of their loans during recent years, the return from investments has averaged less than that derived from loans. This result is due to the fact that a considerable volume of loans, particularly personal loans and advances to small business concerns where service costs are considerable, is made at relatively higher interest rates. Also, a large part of bank investments, consisting of short-term Treasury and the best corporate securities, yields a very low rate of return.

In the year 1944, the member banks of the Federal Reserve System reported earnings on loans at \$563,000,000. In that year, interest and dividends received on securities held aggregated \$960,000,000. The banks realized profits and recoveries on securities in excess of the losses charged off on investments in every year from 1934 to 1944, whereas charge-offs on loans were materially larger than recoveries from that source in every year during this period except 1943 and 1944.

Real estate loans. The lending of money on real estate mortgages has played an important rôle in the activity of American

banks, although the total of such investments for nearly all institutions is substantially smaller than the total holdings of Government or corporate bonds. Mortgage loans necessarily represent a long-term commitment of funds by the lender, since the usual purpose of such loans is to finance the erection and maintenance of real property. In this respect, mortgage loans resemble security investments. On the other hand, since mortgages lack the quality of marketability, they are less satisfactory as an element in a bank's portfolio than are high grade bonds with a broad, open market.

In accordance with the older theory of commercial bank liquidity, and also as a result of adverse experience in the early history of American banking, national banks were not authorized by the Act of 1863 to make real estate loans. Later in the century, however, state banks and trust companies in several jurisdictions were permitted to lend on real estate. Especially in the case of country banks, which held large amounts of time deposits and had few opportunities for making local commercial loans, did mortgage loans play a large rôle in portfolio policy. Many such institutions, in point of fact, actually carried on a business more akin to that of savings or mortgage banks than to commercial banking, as the term has been traditionally defined.

The Federal Reserve Act first permitted national banks outside large cities to make farm mortgage loans. Later, permission to make urban mortgage loans up to one-year maturity, under strict safeguard, was extended, and subsequent legislation broadened the power. Loans may now be made by national banks on first mortgages on urban or farm realty. If the mortgage has a single maturity, loans may be made up to 50 per cent of the value of the mortgaged property, and with a maturity up to five years, with renewals permissible. If installment repayments that will aggregate at least 40 per cent of the amount of the loan are provided, it becomes permissible to lend up to 60 per cent of the value of the pledged property, for a period up to 10 years. Mortgages insured by the Federal Housing Administration (FHA mortgages) under Title II of the National Housing Act are exempt from these restrictions.

A national bank may make mortgage loans, in the aggregate, up to either the full amount of its unimpaired capital and surplus or up to 60 per cent of its time and savings deposits, whichever is the greater. In addition, national banks may acquire real estate mort-

gages when given in good faith to protect debts previously contracted on an unsecured or otherwise secured basis.

Amount of mortgage loans. The great decline in realty values during the depression of the early thirties, and the impairment of liquidity suffered by banks that had large amounts of real estate and farm mortgages in their portfolios, have caused such holdings to shrink in recent years. At the end of 1930, all member banks held \$386,726,000 in farm mortgage loans, and \$2,847,045,000 in loans on other real estate. At the end of 1934, farm mortgage loans of member banks had fallen to \$261,796,000, a drop of 33 per cent. Urban loans fell from \$2,847,045,000 to \$2,011,565,000, a decline of 30 per cent. Of course, this decline reflected in a measure the suspension of a number of banks during the interim, as well as wholesale foreclosures on defaulted loans and repayments.

The extent to which mortgage loans are favored by country banks is illustrated by the following classification of member bank mortgage loans, as reported by the Federal Reserve Board, for December 30, 1944:

	NEW YORK BANKS		CHICAGO BANKS	
	<i>Amount</i>	<i>% of Loans and Investments</i>	<i>Amount</i>	<i>% of Loans and Investments</i>
<i>Real Estate Loans</i>				
On farm land ..	\$ 8,000	—	\$ 631,000	0 01
On residential property ..	46,072,000	0.20	13,659,000	0 25
On other properties ..	40,295,000	0.17	9,647,000	0.18
Total	\$86,375,000	0.37	\$23,937,000	0.44
	RESERVE CITY BANKS		COUNTRY BANKS	
	<i>Amount</i>	<i>% of Loans and Investments</i>	<i>Amount</i>	<i>% of Loans and Investments</i>
<i>Real Estate Loans</i>				
On farm land.	\$ 47,124,000	0.14	\$ 195,484,000	0 69
On residential property . . .	1,096,005,000	3.26	1,234,019,000	4 33
On other properties . . .	235,960,000	0.70	289,611,000	1.01
Total.	\$1,379,089,000	4.10	\$1,719,114,000	5.03

In addition to such holdings of real estate mortgages by member banks, non-member institutions have held almost a billion dollars of such loans.

Several efforts to increase the "shiftability" of mortgage loans have been made in recent years. Mortgages may now be used as security for the special four-month advances that member banks may obtain from the Federal Reserve banks. The Federal Home

Loan Bank System of twelve home loan banks serves building and loan associations and other mortgage banking institutions, but not commercial banks. However, by relieving the pressure on other lenders, the result is to help stabilize the whole mortgage situation in deflation periods. Insurance of mortgages under the National Housing Act, described later, greatly enhances their shiftability.

Questions for Study and Review

1 Why have bond investments of commercial banks increased so rapidly during the past three decades?

2 Why was the authority to invest in corporate bonds withheld from banks in the original National Banking Act?

3. Summarize the statutory restrictions which govern bond investments by banks at the present time

4 Can the purchase of long-term bonds by commercial banks be regarded as an example of a self-liquidating transaction? Does this purchase increase the bank's liquidity ratio?

5. From the point of view of the commercial bank's portfolio policy, compare the concepts of liquidity and marketability

6. How do bank examiners evaluate a bank portfolio?

7. What are "Lombard loans"? Are they permitted to the Federal Reserve banks in the United States?

8. Why do country banks tend to invest a larger percentage of their total resources in bonds than do city institutions?

9. A commercial banker says he must get at least 5 per cent from his bond investments, because he pays 3 per cent on savings accounts and he needs at least 2 per cent additional to cover his expenses and yield some profit. Is his position sound?

10. To what extent is it advisable for commercial banks to make real estate mortgage loans? Have recent developments in mortgage banking helped to improve the suitability of such loans for commercial institutions?

Problems

1 A commercial bank has unrealized appreciation of \$2,000,000 in its bond account. It has no holdings below Group I. What should it do in the event that it sells a substantial amount of bonds and thus realizes a profit?

2. There is a desirable 4 per cent bond of a financially strong corporation that a bank would like to buy. It is selling at 102, and it is convertible into ten shares of stock, each being quoted at 68. Can this bond be purchased under the Comptroller's Regulation?

3 To what extent at the present time may a commercial bank act as an investment dealer? Under prevailing restrictions, would it be advisable for a bank located in a city of 600,000 population—where a number of insurance companies, savings banks, and other investment institutions are located—to open a bond department? Outline the considerations that would influence the decision.

4 A bank board is undecided whether to invest 20 or 30 per cent of its time deposits in real estate mortgage loans. Would the decision to have half the mortgages insured by the Federal Housing Administration affect the final choice of policy?

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CHAPTER 14

Bank Investments—Portfolio Policies

Organization for bank investment. Now that bond investments have become more important than loans for numerous commercial banks, such banks can no longer afford to pursue haphazard investment policies. Rather, it is necessary to build up within the institution an organization capable of handling the investment portfolio of the bank soundly and conservatively, with necessary adjustments from time to time as required by changing conditions. While this may prove costly, it can be offset in many instances by a contraction of loan department expenses because of the lessened relative importance of this phase of the bank's business.

As a practical matter, responsibility for conducting the bank's portfolio of investments should be placed upon one officer. However, a written statement of policy and investment program should be prepared and approved by the whole board of directors.

In addition to the personnel of the bank's own investment department, which should comprise at least some persons with a training in investment rather than commercial lending, several other sources of information and advice are available and should be utilized to the extent required. Statistical services, correspondent banks, security dealers, and investment counsel organizations, which furnish advice for a fee, are utilized by banks to aid or supplement their own investment personnel. Large metropolitan banks have built up extensive investment departments, not only for their own requirements but also to help correspondent banks. Institutions with large personal trust departments can utilize investment information for both trust accounts and bank investment management.

The Comptroller of the Currency has made it clear that the ultimate responsibility for investments rests with the bank's directors and officers, even where individual bonds conform to the rating standards described in the preceding chapter. "Such ratings are not conclusive on the question of eligibility," he has stated. This consideration makes it of added importance that banks maintain a file of data on the securities they purchase to enable them to satisfy examiners that the choice of bonds is based upon adequate investigation by the buying institution.

The investment department of the bank has two primary functions. First, it must aid the management in evolving a suitable investment policy, laying down the broad principles that will guide the conduct of the bank's portfolio in the light of the particular conditions that confront the institution. Second, it will analyze and watch individual issues that are held, or that are being considered for purchase.

Factors that determine portfolio policy. A bank's investment policy cannot be evolved in a vacuum. It must be based upon an analysis of the following factors:

(1) *The capital position of the institution.* The higher the ratio of capital funds (capital, surplus, and undivided profits) to deposits, the greater the ability of a bank to purchase longer-term bonds that are subject to some risk of market depreciation at times. Where capital funds are relatively small with relation to deposits, on the other hand, it is necessary to pursue an investment portfolio policy of maximum conservatism, as regards both the quality of investments and their maturities.

(2) *The behavior of the bank's deposits.* Institutions whose deposits are quite stable in volume, either because they comprise a large proportion of savings deposits or for other reasons, can hold a greater percentage of bonds that may depreciate on the market for a time than can banks that may be called upon by depositors to pay out a large part of their deposits at one time. Banks in large cities belonging in the category of so-called "money market institutions" are particularly subject to heavy withdrawals on short notice, since a large proportion of their deposits consists of funds placed with them by other banks and by large corporations which may make sudden withdrawals of most or all of their deposits.

(3) *The nature of the other assets of the bank.* Where a bank holds substantial amounts of other assets of a "slow" character, such as mortgage and term loans, foreclosed real estate, or a costly bank

building, it must be so much more careful in its investments. On the other hand, where other assets are nearly all of a highly liquid, sound character, the investment portfolio policy could be based upon the assumption that the bank will not be embarrassed if a temporary decline in the level of bond prices makes it impracticable for a time to sell securities, even if deposits should shrink in volume.

Investment risks. There are two different kinds of risk that the management of a bank must consider in the evolution of its investment policy. First, there is the credit risk, that is, the possibility that interest or principal will not be paid when due by the obligor. Second, there is the risk of a rise in the level of interest rates due to a change in supply and demand factors in the money market, which will cause high-grade bonds to decline in price regardless of the strength of their credit status.

Discussing the choice of bank investments, a report by the Bank Management Commission of the American Bankers Association on "Investment Standards and Procedure" outlines three primary considerations for the management. These are:

(1) The bank may want to raise cash through sale of bonds during emergency periods. At such times, bonds of poor credit tend to decline very much more sharply than higher-grade issues.

(2) The bank is investing not only its own capital, but also funds received from depositors payable on demand or on short notice. Hence, the management cannot adopt the point of view of an investment trust, but must be ready to pay out deposits in full on very short notice, if required.

(3) The bank must periodically make public a statement of condition, and must subject itself to periodic examination by the regulatory authorities.

United States Government bonds. The bulk of the investments of commercial banks today are in obligations of the Federal government.

Treasury issues or those guaranteed by the United States Government are in a class apart, among bank investments. The chief reasons why banks especially favor such investments are:

(1) Their high quality. They are backed by the unlimited taxing power of the Federal government.

(2) They can be utilized freely as collateral for advances from the Federal Reserve banks, without penalty rates.

(3) It has been indicated that advances will be made against

Government bonds at par by the Federal Reserve banks, even where they are quoted at a discount in the market.

(4) The Treasury and the Federal Reserve banks have intervened in the market to avoid undue, wide fluctuations in Government bond quotations. No similar artificial support at times of crisis is available in the market for any other type of obligation.

(5) Bank examiners are known to look with favor upon large holdings of Government bonds by banks.

The question is sometimes asked whether a bank may have too large a proportion of its investments in Government obligations. Apart from considerations of yield, it is doubtful whether this can be so. For the reasons just stated, United States Government direct and guaranteed issues enjoy a number of advantages reflecting both their innate strength and the favorable attitude toward them shown by the supervisory authorities. It is true that a bank may have too large a proportion of its assets in long-term investments that are subject to depreciation when interest rates rise, particularly if the ratio of capital funds to deposits is low. Having determined the proportion of the bank's assets that is to be placed in investments, however, Government issues represent the most conservative single class of securities for a bank to buy.

The fact that the Federal budget has been unbalanced for a period of years has naturally caused serious concern to a number of bankers whose institutions hold large amounts of Treasury obligations. There can be no question that a chronic budget deficit involves a number of serious dangers for the financial and economic stability of the nation. On the other hand, it must be recognized that the Federal Government can expand taxes as required to maintain service on an enlarged debt, and that it can even resort in extremes to the issuance of fiat money to meet its obligations. No other obligor in the country can do this.

If, because of unsound fiscal policies, an inflationary rise in commodity prices finally results and bond prices are depressed because of this, there is no reason why Government bond quotations should suffer any more than the prices of other issues. They may decline considerably less, in fact, because of artificial support and the ability of the banks to obtain advances against their Government bond portfolio.

Furthermore, when Government bonds decline for whatever reason, there is usually considerable shifting by holders of corporate

COMPARISON OF INVESTMENT HOLDINGS OF COMMERCIAL BANKS, 1921-1944

<i>Type of Security</i>	1921		1930		1933		1944	
	<i>Amount</i> (000 omitted)	<i>% of</i> <i>Total</i>	<i>Amount</i> (000 omitted)	<i>% of</i> <i>Total</i>	<i>Amount</i> (000 omitted)	<i>% of</i> <i>Total</i>	<i>Amount</i> (000 omitted)	<i>% of</i> <i>Total</i>
U. S. Government issues.....	\$2,924,000	35	\$3,614,000	26	\$7,141,000	53	*\$75,875,000	93
State, county, and municipal bonds .	722,000	9	1,221,000	10	1,770,000	13	3,422,000	4
Railroad and public utility bonds ...	1,396,000	17	1,968,000	15	1,639,000	12	2,733,000	3
Other bonds, stocks.....	3,364,000	39	6,869,000	49	2,958,000	22		
Total	\$8,406,000	100	\$13,672,000	100	\$13,508,000	100	\$82,030,000	100

* And U. S. Government guaranteed bonds

issues into Governments, which helps to stabilize the market for the latter.

Banks have the choice of purchasing Treasury *bills*, maturing within a few months at the most, Treasury *notes* coming due within five years, or longer-term *bonds*. During recent years, the yield on Treasury bills has been very low, while the return from other Treasury securities has increased with the lengthening of maturities. Some banks have pursued a policy of establishing a reserve out of the higher yield they obtain from longer-term bonds to offset possible depreciation of these issues in the future due to a rise in the level of interest rates.

Distribution of bank investments. The bulk of commercial bank funds placed in investments has been in United States Government, state and municipal, railroad, and public utility obligations. During the years preceding 1930, a number of banks bought industrial and foreign bonds freely, while state banks and trust companies, where state law permitted, acquired stocks of utility and industrial enterprises as well. Since 1930, however, banks have concentrated their investments increasingly in United States Government bonds and contracted holdings of other types of obligations.

The table opposite compares investment holdings of all commercial banks. The comparisons are made, by types of securities, for the years 1921, 1930, 1933, and 1944 (June 30 of each year). The figures have been taken from the annual reports of the Comptroller of the Currency.

A fuller statement of bank investments, by classes of securities held, is published by the Board of Governors of the Federal Reserve System. This report is compiled from the condition reports made to the Board by member banks, and is made available after each call for bank condition statements issued by the Board. The investments of all members, December 30, 1944, were therein shown as follows:

<i>Type of Security</i>	<i>Amount</i> (000 omitted)
U. S. Government direct obligations—total	\$66,783,630
Treasury bills	3,747,838
Treasury certificates of indebtedness	13,981,838
Treasury notes	14,126,875
United States savings bonds	455,407
Bonds maturing in 5 years or less	5,308,973
Bonds maturing in 5 to 10 years	22,466,622

Type of Security (Continued)

	<i>Amount (000 omitted)</i>
Bonds maturing in 10 to 20 years .	5,117,870
Bonds maturing after 20 years .	1,578,489
Obligations guaranteed by United States Government..	901,737
Obligations of States and political subdivisions	\$ 2,857,760
Other bonds, notes, and debentures . .	\$ 2,031,223
Corporate stocks	\$ 318,747

Corporate investments are classified in detail in the Supplement to the annual reports of the Comptroller of the Currency. On December 31, 1941, all commercial banks held \$862,000,000 of railroad obligations, \$559,000,000 of public utility bonds, and \$813,000,000 of industrial and miscellaneous bonds. Foreign bonds held totaled \$171,000,000.

Investments and size of bank. Country banks have tended in the past to place a larger proportion of their funds in security investments than have city institutions. Thus at the end of 1930, before depression influences became pronounced, the distribution of security investments of the banks, by groups of institutions (shown in *Member Banks Call Report*, issued by the Federal Reserve Board), was:

<i>Bank Groups</i>	<i>Number of Banks</i>	<i>Security Investments</i>	<i>% of Total Resources</i>
New York City banks	48	\$2,435,356,000	18
Chicago banks .	14	517,586,000	20
Other Reserve city banks .	402	3,517,429,000	22
Country banks .	7,588	4,518,652,000	29
	8,052	\$10,989,023,000	23

A Senate Banking and Currency Committee report on bank security investments at the time ascribed this tendency for country institutions to favor bond investments for their portfolios as follows:

Country banks, it will be noted, have a larger proportion of their resources in bond investments than do city institutions, whereas the latter are more heavily involved in security loans. This reflects the relatively restricted demand for advances on security collateral in the smaller communities, and the less direct access of country banks to the financial centers, where the need for security loans is keenest. It also reflects the larger proportion of time deposits of the country institutions, as it is generally felt the receipt of such deposits justifies the making of less liquid commitments, including the purchase of securities that may not be readily marketable.

After 1930, with the shrinkage in all types of loans and the growing investment of bank funds in Government bonds, such holdings constituted a larger proportion of the portfolios of all types of institutions than ever before. At the end of 1944, investments constituted more than 60 per cent of the total resources of all member banks, and almost 90 per cent of such investments consisted of United States Government obligations.

Secondary reserves. The average banker purchases bonds for investment because sufficient attractive lending opportunities are not available, to secure added diversification for his portfolio, and to obtain the return thus available. High-grade investments also can be turned into cash readily to meet deposit withdrawals. High-grade investments that enjoy a broad and active market may be preferred to loans because they can be sold and so turned into cash immediately, whereas time loans must be held to maturity unless rediscounted at the Federal Reserve bank.

When bonds are purchased because they can readily be converted into cash to meet deposit withdrawals, they are sometimes called a *secondary reserve*.

Only that portion of the investment account which consists of the very highest grade of short-term issues is a true secondary reserve. Federal obligations of longer term can be included in a more limited sense because, while subject to some price depreciation with a change in the level of interest rates, they can be used as collateral to obtain advances from the Federal Reserve banks.

The risk of loss. The choice of investment securities, and the making of decisions to expand or contract its investment portfolio from time to time, impose a difficult task on the management of a bank. Losses on investments can be heavy, as is shown by the following statistics of charge-offs from earnings made by national banks on this account in depression years:

<i>Year Ended June 30</i>	<i>Percentage Charged Off to Total Bonds and Securities Owned</i>
1920....	1.48
1921 ..	1.89
1922..	0.73
1930....	0.89
1931.	1.55
1932	2.80
1933 ..	3.21
1934. . .	2.59
1935.	1.28
1938.....	.88

Records of closed banks bring out in even more striking form the serious risk of loss involved in bank investments. A study of losses on actual sales (expressed as a percentage of cost) of bonds sold in the course of liquidation of closed banks in New York State after 1929 indicated an average for 34 banks of 37.49 per cent. Losses of individual institutions ranged from 14.89 to 83.33 per cent.

A study of a typical group of country banks showed a decline on April 13, 1932, of fully 37 per cent in the market quotations of their bond portfolios from the high levels of 1928. In many individual instances the decline was even greater. Needless to say, such heavy losses on investments wiped out the surplus and even the capital of many individual banks, impaired their liquidity, and caused suspension in a number of instances during the years 1930-1933. Needless to say, the great bulk of these losses was incurred on investments in more speculative corporate and foreign securities.

Maturity distribution. A sound investment portfolio policy for a bank will place emphasis upon a conservative distribution of maturities, as well as the maintenance of a high average quality for securities held.

If the prevailing level of interest rates should rise, for whatever reason, bonds of the highest grade will suffer depreciation in the market. Banks not only wish to avoid such depreciation, but they also want to be in a position to add to their holdings of the highest-grade bonds at times when they are relatively low in price. This calls for a policy of favoring short-term issues when the level of bond prices is relatively high, and of switching to longer-term bonds when the level of quotations is low. The determination of when bond prices are low or high is a matter of judgment, however, and many bankers found that they were invested in short-term issues to an undue extent in the middle and late 30's because they thought at that time that bond prices were headed for an early sharp decline.

The soundest course of procedure is to adopt a program of maturity diversification, with short-term issues favored to a moderate extent when bond prices appear high. This plan of "spaced maturities," adapted to individual banks, is now widely followed.

The distribution of maturities must be largely governed by the character of an individual bank's deposits, the relation of its capital funds to its deposits, and the liquidity of other assets held. In other words, only if the bank feels that it is able to carry the risk of at least temporary price depreciation, in the light of all pertinent factors, should it purchase freely of long-term bonds.

Banks can now trace from week to week changes not only in the

total of United States Government obligations held by the reporting member banks of the Federal Reserve System, but also the changes in holdings of the three categories of bills, notes, and bonds. These have been reported separately in the weekly reporting member bank statement, which is released each Tuesday morning, since February 8, 1939. If this statement shows a decline in bill holdings and additions to long-term bonds held, for example, indications are that a number of banks feel inclined to add to their holdings of longer-term maturities at the time.

Analysis of a bond portfolio. The analysis of the bond portfolio policy of a bank is a highly complex and technical matter. The principles and methods involved are far from standardized. One bank analyst, however, uses the following procedure.¹

1. The statement of condition is reconstructed thus:

<i>Assets</i>		<i>%</i>
Cash	\$ 80,629	10
U S Government bonds	81,763	11
Other bonds	485,121	61
Loans and discounts	126,608	16
Real estate loans		
Bank building	10,851	1
Real estate	6,399	.
Other assets	967	
Total	\$792,338	
Cash and U S. Government bonds	162,392	21
Total bonds	566,884	72
<i>Liabilities</i>		<i>%</i>
Capital stock	\$ 50,000	
Preferred stock	58,325	
Surplus	25,425	..
Undivided profits	36,655	..
Reserve for contingencies	30,000	
Bond reserve		
Time deposits	443,015	75
Demand deposits	148,857	25
Other assets	61	.
Total	\$792,338	
Capital account	170,405	3½-1
Deposits	591,872	..
Protective amount and ratio*	238,405	30

* Includes capital account of \$170,405, reserve for contingencies \$30,000, and \$38,000 market appreciation of securities. Protective ratio is the percentage that securities can shrink before deposits are jeopardized, assuming other assets are worth par.

2. The portfolio itself is then analyzed:

¹ From "Banks and Their Bonds," by "Portfolio," in *The Wall Street Journal*, 1935-36.

Above call price

I. GROUP SUMMARY

	Group	Amount	%	Cost	Value May 26, 1936		Profit	Income
	U. S. Govt.....	\$ 81,000	12	\$ 81,000	\$ 85,000	14	\$4,000	\$2,445
\$35,000	Railroad	202,000	29	185,000	193,000	32	8,000	9,222
24,000	Utilities	130,000	20	121,000	125,000	22	4,000	5,972
43,000	Industrials	85,000	12	77,000	83,000	14	6,000	4,247
...	Municipal	77,000	11	78,000	80,000	13	2,000	3,263
...	Foreign	1,000	.	1,000	1,000	.	..	40
...	Defaulted	105,000	16	27,000	29,000	5	2,000	
\$102,000	Total	\$681,000	100	\$570,000	\$596,000	100	\$26,000	\$25,189

II. DISTRIBUTION ACCORDING TO QUALITY

Moody Rating	U. S. Govt.	%	Railroad	%	Util	%	Ind	%	Munexp.	%	Foreign	Totals	%
AAA	\$81,000	100	\$30,000	12	\$59,000	46	\$18,000	19	\$78,000	100	..	\$266,000	40
AA	...	...	54,000	21	28,000	22	...	29	...	.	.	82,000	12
A	...	...	39,000	15	22,000	17	26,000	28	...	...	...	87,000	12
BBB	...	...	14,000	5	...	.	25,000	5	...	...	.	39,000	6
BB	...	...	39,000	15	...	...	5,000	11	...	...	..	44,000	7
CCC	...	...	5,000	2	14,000	10	11,000	10	...	...	..	30,000	5
Default.	...	...	77,000	30	6,000	5	10,000	10	...	...	\$14,000	107,000	18
Totals....	\$81,000	100	\$258,000	100	\$129,000	100	\$95,000	100	\$78,000	100	\$14,000	\$655,000	100

III. CALENDAR DISTRIBUTION OF HIGH-GRADE BONDS (YEARS)

	1-2	4	5	Total	10	15	20	Longer	Total	Grand Total
U. S. Govt.....	...	...	\$5,000	\$ 5,000	\$11,000	\$15,000	\$30,000	\$ 20,000	\$76,000	\$81,000
AAA.....	\$5,000	\$45,000	.	50,000	.	9,000	.	25,000	34,000	84,000
AA.....	...	...	...	...	14,000	8,000	5,000	40,000	67,000	67,000
A.....	...	...	...	...	15,000	10,000	20,000	31,000	76,000	76,000
Totals.....	\$5,000	\$45,000	\$5,000	\$55,000	\$40,000	\$42,000	\$55,000	\$116,000	\$253,000	\$308,000

Trading policy. One dubious policy in conducting a bank's bond account is the resort by the management to frequent purchases and sales designed to achieve trading profits.

Experience shows that when bank managements adopt such a trading policy, they often tend to become less careful in the choice of investments. The result is that investments of poorer quality are purchased in the hope of early appreciation; but if the price does not rise as expected, the issue is held and becomes part of the portfolio, lowering its average quality. Even where trading is limited to government obligations, this policy may lead to the purchase of too many long-term bonds.

While banks need not necessarily purchase bonds with a view to holding them to maturity, short-term trading profits should not be the objective. On the other hand, switches from poorer- to higher-grade issues are always in order, particularly in the light of economic trends. Similarly, switches from short-term to longer-term issues when bond prices are relatively low, and back into short-term issues when they are relatively high, may prove justifiable if conducted with moderation.

Trades in bonds will, if profitable, produce substantial sums of money. Since a subsequent decline in the bond market may lead to corresponding losses later on, turnover profits should be kept as a reserve against future losses on bonds as a wise precaution, even if no loss is in sight at the moment.

Questions for Study and Review

1. What are the chief sources of investment information and advice available to a bank?
2. What are the basic considerations that should guide a bank's portfolio policy?
3. Distinguish between credit and money market risks affecting bank investments.
4. Why are United States Government obligations preferred as bank investments?
5. Can a bank have too large a proportion of its investments in Treasury issues?
6. What are the chief types of securities other than Governments owned by banks?
7. Do bank investments constitute secondary reserves? Criticize the secondary reserve concept.
8. What is a sound rule for the distribution of maturities in the bond portfolio of a bank?

9. To what extent may a bank trade in bonds in its portfolio?

10. What is a sound rule with regard to the handling of bond trading profits in a bank's accounting?

Problems

1. A commercial bank has \$3,500,000 of surplus funds on hand at a given date. Government bonds yield 3 per cent; other high-grade bonds, 4 per cent; and reasonably good commercial loans and paper, $3\frac{1}{4}$ per cent. If the bank's portfolio is in fairly good balance, which considerations will determine the distribution of the surplus funds among these three types of commitments?

2. Would you favor long-term or short-term bonds for investment by banks at the present time, in the light of relative yields available on each? Give reasons for your answer.

3. The X National Bank finds that it is gaining at the rate of \$20,000 monthly in time deposits, while its demand deposits are tending to decline. As a result, what changes may be desirable in portfolio policy?

4. A bank has a building and foreclosed realty equal to 40 per cent of its deposits. Improved conditions in the town offer an opportunity to sell all this realty without loss, and to rent suitable quarters on a long-term lease. How would the sale of realty affect the bank's investment policy? Would you suggest buying investments to replace fully the sold realty? Why?

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CHAPTER 15

Bank Operations

Bank operations. Every commercial bank performs certain basic services. These activities, common to all banks, may be referred to by generic terms such as "transferring of titles," "substitution of credit," and "safekeeping," or by the functional designations of "exchange," "loans and discounts," "deposits," "trusts," "fiscal agency," "advisory," and "investment." Still another method of classification would be the listing of the actual names of the various departments of a typical bank; such names are usually descriptive of the activities of the departments. The last method has the advantage of concreteness, whereas the others are abstract.

Paradoxically, a typical bank is very difficult to find. The diversity of banking and banks is so great that a typical bank must necessarily be a composite created for purposes of exposition and explanation.

Certain banks stress particular activities to the virtual exclusion of others; hence the result is that no one internal organization or departmentization may be called typical. Some so-called commercial banks are really savings banks. Trust companies are often merely commercial banks (banks of deposit and discount) without that name. Other banks, particularly the large ones, may be merely head offices for a domestic and foreign branch system. Some banks specialize in serving other banks and become known as bankers' banks. Still others set up such high minimum balances and other strict requirements that they serve only the larger corporations and wealthy individuals.

The Farmers' Bank of Cross Roads, North Dakota, has, *on the surface*, little in common with the First National Bank of New

York. The president of the Last National Bank of Hohokus might be more confused by the departmental maze of the Chase National than by Einstein's latest theory. A Vermont banker and a Kansas banker might not even understand the same banking language, much less speak a common business tongue. Rock-ribbed hills and sun-baked prairies present different problems, and a bank under our unit system must take on the color of its community. In few other fields of human endeavor is the pattern so varied and loosely woven.

Laws, regulations, examinations, and supervision, both state and national, have thus far failed to make a northwestern bank resemble an eastern bank either in operation or in character. Under the surface of size, departmentization, prestige, and organization, however, their basic similarity may also be recognized. The internal structure of banks may differ, the banking process itself may vary, but the basic services rendered are fairly uniform. These services, common to all banks, will be utilized in this chapter to explain bank operations.

An earlier chapter described the important banking transactions and their effect on the balance sheet. In this chapter, some of these transactions will be followed through the operating departments of the bank, and the men, machinery, system, and law involved in the passage of such transactions through these various departments will be considered.

First impressions. Let us assume that John Graduate, newly employed by American Gadgets, Inc., after a few months of conscientious endeavor is promoted to the position of bookkeeper. In his new position, his first job is to deposit the day's receipts in the Honest National Bank of New York, right around the corner. Probably still regarding banking as much of a mystery, John Graduate, with great anticipation, approaches the pseudo-Greek marble temple housing the bank. His enthusiasm successfully weathers the cold, unfriendly atmosphere, and he summons enough courage to explain to the guard that he brings a deposit.

The guard directs him to a pale young man behind a barred window, reminiscent of the wicket in the jail back home. This window is labeled "Receiving." Beside it, a formal sign conveys the information that deposits, up to a maximum of \$5,000 for each depositor, are insured by the Federal Deposit Insurance Corporation of Washington, D. C. Looking through the window, John Grad-

uate sees that the young man, known as a "teller," is completely surrounded by a wire cage.

A deposit is made. Reassured by these evidences of safety, John Graduate passes the deposit over the window, with a memorandum

Deposited for account of <i>AMERICAN GADGETS, INC.</i> in the HONEST NATIONAL BANK of New York																
Nov. 15, 19—																
All items credited subject to payment and the conditions printed on the reverse of this deposit slip																
Cash Checks as follows: <i>Hollywood</i> <i>Public National Bank</i> <i>Brooklyn</i> <i>Reno</i>	Total	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">Dollars</th> <th style="width: 50%;">Cents</th> </tr> </thead> <tbody> <tr> <td style="text-align: right;">78</td> <td style="text-align: right;">40</td> </tr> <tr> <td style="text-align: right;">5,000</td> <td style="text-align: right;">00</td> </tr> <tr> <td style="text-align: right;">43</td> <td style="text-align: right;">99</td> </tr> <tr> <td style="text-align: right;">8</td> <td style="text-align: right;">75</td> </tr> <tr> <td style="text-align: right;">69</td> <td style="text-align: right;">14</td> </tr> <tr> <td style="text-align: right;">5,200</td> <td style="text-align: right;">28</td> </tr> </tbody> </table>	Dollars	Cents	78	40	5,000	00	43	99	8	75	69	14	5,200	28
Dollars	Cents															
78	40															
5,000	00															
43	99															
8	75															
69	14															
5,200	28															

DEPOSIT SLIP

of the items, called a *deposit slip*. This deposit slip, which he prepared in duplicate before coming to the bank, is reproduced above.

The deposit slip is an original entry and is legally binding on the bank after the slip has been initialed by the teller. For this reason banks usually require depositors to make out their own deposit tickets. False claims of errors in deposits can be successfully met

by producing a deposit slip written or prepared by the depositor.

The teller, receiving the deposit from John Graduate, quickly counts the cash, looks over the indorsements on checks to see that they are proper, initials the duplicate of the deposit slip and returns it, and turns to the next depositor. The complete operation takes less than a minute if the deposit is in order. The responsibility for further handling of the items involved is thus passed to the bank, and John Graduate, with the satisfaction of a job well done, returns to American Gadgets.

Within the bank, the deposit initiates a multitude of operations. Each of the typical activities involved in such deposits will now be followed. Some of the items involved will pass through banking institutions which have never heard of the Honest National Bank; to them its sole identity is the number assigned to it by the American Bankers Association. Yet, as the reader will see, these banking institutions serve faithfully and diligently both the Honest National Bank and its depositors. Such is banking.

One check goes to Hollywood. Included in the deposit is a check for \$5,000, sent by Poor Pictures, Inc., in payment for the gadgets purchased the previous month from the New York company. The check is a corporation check, signed by the appropriate corporate officers of the picture enterprise and drawn on the Best National Bank of Hollywood. The check has been properly indorsed on the reverse side, with the name of American Gadgets, Inc., and its appropriate officer's signature (or a rubber stamp is used). The amount of the check is not disproportionate to the balance maintained by American Gadgets. Many checks of this size, and larger, are deposited monthly by the company. The check should be indorsed as follows:

FOR DEPOSIT

(Name of individual, firm, or corporation).

A legible indorsement of this type is essential so that the bank can charge the check back to the customer's account if the check is returned unpaid. These points are all noted by the teller or by his assistant when the checks are sorted for the block proof.

Batch, or block, proof. The batch, or block, proof system is used in this bank (and most others) to expedite the handling of items received over the window. This involves the sorting and

proving of a number of deposits at once, when the teller has a large enough accumulation to warrant the handling. Cash is verified by the teller before the depositor leaves the window (except in the case of large cash deposits or of deposits containing unusual amounts of minor coins, such as Sunday School collections).

In large banks, the deposit tickets and checks may be turned over to a *central proving*, or *rack*, *department* for preparation of the block proof. In smaller banks, however, the teller has an assistant, or block clerk, who lists the deposit tickets on the block sheet and adds them to compute the total *credits* for the block.

The checks drawn on the teller's own bank are likewise totaled. A separate grouping is made of all checks drawn on banks belonging to the clearing house. The checks drawn on non-clearing banks in the same town will also be separately totaled. The remaining checks, drawn on out-of-town banks, are sorted out and totaled. The totals of these various groupings of checks, added to the cash figures appearing on the deposit slips, constitute the *debits*, and prove with the credits mentioned before.

This *run* of checks and deposit slips is called a block, or batch. A block number is put on each package of items and on its corresponding adding machine slip.

Separate blocks are usually made of each large deposit. The bank generally accepts such deposits, by agreement, subject to verification and proof, even though the deposit slip is initialed by the teller when the items are left at the window.

Batch proof of the block in which the American Gadgets deposit was included is shown on the next page.

The totals of the various blocks during the day are proved with the cash held by the teller at the close of business. The sub-totals are proved with the various departments to which the particular groups of checks have been forwarded. Thus, the bookkeeping department must credit the teller with the total of the various block debits of the day. Likewise, the transit department clerks must credit the teller with the grand total of the various block debits, covering the several packages of checks drawn on out-of-town banks and turned over to the transit department during the day.

The block system greatly simplifies proving on the part of the teller. All errors in figures, except in the cash, will show up in the particular block proof in which they occur. Thus localized, they are easy to discover and correct. The general advantage of the block system, therefore, is in speeding up the handling of checks

BATCH PROOF

Teller No. I

Block No I

<i>Cash</i>	<i>Transit</i>	<i>Miscellaneous</i>	<i>Clearing House</i>	<i>Checks on Us</i>	<i>Credits</i>	
400 50	343 18	69 14	600 00	140 00	Am Gadgets, Inc.	5,200.28
100 10	917.46	368 43	14 96	800 00	Anaconda Sulphur Co	16,230.33
150 00	25.50	437 57	38 35	63 00	Briggs Stores	1,500.00
78.40	844.70		47 84	4 00	Autobuses, Inc	784.00
729.00	2,000 00		3,000 00	98 14		23,714.61
	1,060 00		2,120 00	360 00		
	256 20		1 75	21 60		
	5,000.00		380 46	9.18		
	10,447 04		175 00	4,000 00		
			29 50	5,495 92		
			60 00			
			84 48			
			43 99			
			8 75			
			6,605 08			
					Recap	729 00
						10,447 04
						437.57
						6,605 08
						5,495 92
						23,714 61

and in detecting errors. Checks may be sent to other departments as soon as enough have accumulated to make handling worth while, instead of waiting until the close of business. Furthermore, large checks may even be handled immediately, without waiting for other checks to come in. This procedure means that the bookkeepers will not be more than two or three hours (on certain accounts, not more than thirty minutes) behind the tellers in their work.

Before the block system was widely adopted, the bookkeepers were necessarily one day or more behind the tellers in their entries; all checks were delayed at least twenty-four hours, with consequent loss of interest on the part of the bank and its depositors. Under the block system, checks for large amounts can be, and usually are, kept moving continuously through the banking system.

The check becomes a transit item. The deposit slip of American Gadgets, Inc., fell in the A-F group of the first block, or batch, of the morning. The check on the Best National Bank of Hollywood was placed with the transit items in the same block and delivered to the transit department within an hour after the deposit

was left at the window by John Graduate. The transit department has two alternative methods of handling this check. It may be sent to the Federal Reserve bank, along with many other checks, listed, grouped, and indorsed in accordance with Federal Reserve regulations. From that point on, the Federal Reserve par collection system, described later, would handle it.

Alternatively, the Honest National Bank may handle the check through its own correspondent collection system. Banks, particularly the larger ones such as the Honest National, have found it advisable to continue the operation of the correspondent method of handling and collecting items, although it duplicates the Federal system. Quicker and more closely supervised service can be given through correspondents, in some instances, than through the Federal banks. Small items are sent through the Federal Reserve banks, but the larger items are usually sent directly to correspondents to secure immediate personal attention.

Since the Poor Pictures check is for \$5,000, it will probably be sent with other checks to the bank's Los Angeles correspondent, the Fifty-third National Bank and Trust Company, with instructions to credit the account of the Honest National on their books. The Los Angeles bank will probably then do likewise—send the check to its Hollywood correspondent for presentation and payment; or, if the Best National Bank of Hollywood is a member, it will collect the check through the Los Angeles Clearing House.

Why the check is immediately credited to the American Gadgets account. Like other transit items, this check is handled as if it were cash. Thus, when received over the window, the check is immediately credited to the account of American Gadgets, Inc., although the firm will not be permitted to check out this portion of its balance until sufficient time has elapsed for the check to go to Hollywood and the proceeds to be returned to New York. This time delay, or deferring of availability, is based on the average time (during the past) necessary for handling similar items. Air mail and the use of Federal Reserve wire facilities for the transfer of funds have materially shortened the period during which the depositor must wait before drawing against the out-of-town checks placed to his credit. To minimize clerical expense, immediate credit (but not immediate availability) is given on this check by the bank. Instead of carrying the item on memorandum or in a suspense account, as in the case of collections (described hereafter), the bank makes the entries immediately. If the check is returned,

the entries can be reversed; otherwise they stand, and further book-keeping or clerical detail is unnecessary. Since the great majority of checks are good, the saving is apparent.

Transit records. Since the check is handled as if it were cash, the records kept by the various banks through which it passes are very simple. All transit items are presumed to be good until proved otherwise, and the transit records are set up with this point in mind. In fact, the records kept are so abbreviated and skeletonized that considerable additional work may be entailed if checks are returned, because of insufficient funds and other reasons, and further handling is necessitated. The speed with which transit items must be handled also affects the character of the transit records.

The Universal Numerical System, adopted by the American Bankers Association in 1911, permits the reduction of transit records to a minimum. By this coöperative action of the banks, for purposes of identification a numerical designation is assigned to every commercial bank in the United States.

The Reserve cities, existing at that time, are indicated by prefix numbers from 1 to 49, inclusive, the larger cities having the lowest numbers. Clearing house banks in these cities use, in conjunction with this number, a further special number for the individual bank. Thus, instead of the full name "The Chase National Bank in the City of New York," the transit number 1-74 may be used in all records. In this transit number, 1 designates New York City, and 74 is the special number of Chase.

For banks located outside the Reserve cities mentioned before, prefix numbers from 50 to 99, inclusive, are used to indicate the states in which the banks are situated. In addition to the state number, each such bank has a distinctive number of its own. Thus, the transit number 51-233 of the Westport Bank and Trust Company (Westport, Connecticut) is a combination of 51, the state number, and 233, the individual number of the bank.

The latest step in the direction of faster sorting and greater efficiency in collecting items is a check-routing symbol plan which has been developed by the American Bankers Association and the Federal Reserve System. This plan is designed primarily to enable banks, in forwarding checks to their various Federal Reserve and correspondent banks, to sort such items not only for direct handling but also for immediate and deferred availability. It solves the present problem of determining the proper reserve bank or branch

territory in which checks are payable, especially those drawn on banks in states located in two or more Federal Reserve districts.

The routing symbol is the denominator of a fraction, the numerator of which is the American Bankers Association transit number assigned to the drawee bank. The combined symbol, in fractional form, is to be printed in the upper right corner of the check above the figure amount line.

The routing symbol (denominator of the fraction) is composed of not less than three nor more than four consecutive digits. In the case of three-digit symbols the respective digits indicate the following:

The first digit designates one of those Federal Reserve districts which are numbered 1-9.

The second digit designates the Federal Reserve bank or branch serving the territory in which the drawee bank is located. The head office is indicated by figure 1. Branches, if any, are indicated by figures 2-5. Figures 6-9 are used (or reserved) to designate special collection arrangements.

The third digit serves two purposes: First, it facilitates the separation of items which are receivable for immediate credit from those which are receivable for deferred credit (without respect to the number of days of deferred availability) and, second, it facilitates the sorting of items by states in any case where that is convenient.

Figure 0 designates items which are receivable for immediate credit if received in time to be cleared on the current day. All other numbers (1-9 inclusive) in the third position designate items which are receivable for deferred credit. It also designates the state in which the drawee bank is located. These third-digit numbers (1-9 inclusive) do not indicate the number of days of deferred availability, which will still be determined by time schedules of the various Federal Reserve banks and branches.

Four-digit symbols have the same meaning as three-digit symbols except that the first two digits designate the tenth, eleventh, or twelfth Federal Reserve Districts. In this case, the third digit designates the Federal Reserve Office in the district, and the fourth digit designates immediate or deferred availability, and states, parts of states, or certain other cities.

A routing symbol is of significance only to those banks whose items are collectible through Federal Reserve banks.

Up-to-date lists of banks with their transit numbers are pub-

lished yearly, by Rand McNally and Company. Under the authority of the American Bankers Association, this company assigns numbers to new banks.

The transit department keeps a record of the indorser and the drawee bank on each item. This record is secured by retaining a copy of the letters used in transmitting items to other banks. Before the adoption of the numerical system, it was necessary to write out these names and addresses. Even now, when banks fail to print their transit numbers on their checks, it becomes necessary either to look up the numerical designation or to write in complete information. Fortunately, from the standpoint of economy, the percentage of such banks is small and is decreasing yearly.

The numerical system has made possible the following practice. A form letter of transmittal can be filled in on a special adding machine, called a *transit machine*, at very small clerical cost. The numerical transit system is undoubtedly the greatest time and labor saver ever devised in banking.

The original of the transmittal letter is sent with the day's items to the correspondent bank and serves as authority for the handling of the items. Instructions given on this sheet and ordinary banking practice and custom govern the correspondent in this regard. The copy of the letter of transmittal is filed, and constitutes the record of the items passing through the transit department.

Clerking with a camera. The detail work involved in preparing letters of transmittal may be still further reduced by use of the *Recordak*, a patented camera used to photograph the front and the reverse of each check passing through the transit department.¹ This camera photographs 16,000 checks on each 200-foot roll of film, making two pictures simultaneously on two rolls of film, and providing a complete, permanent record of every item handled. With this record only a single adding machine run-up is necessary on each "cash letter." This practice avoids the work and errors involved in listing the transit numbers of the indorsers and the drawee banks. The chief value of the photographic record is the ability to reproduce on a screen any check which may have been lost in the mails or any check the original of which may later have been altered.

The Honest National Bank is Recordak equipped—a factor which is further assurance to American Gadgets as to the safety of

¹ Recordak is used also in other departments, such as bookkeeping and clearings.

its checks. To be specific, in case of loss of the \$5,000 check, by fire, negligence, or theft, American Gadgets can secure from the bank a photographic record of the check, which is good legal evidence to support the claim for a duplicate from Poor Pictures, Inc.

Settlement of cash letters. The letters of transmittal used by the transit department are usually referred to as *cash letters*, a name derived from the items on them, which are known as *cash items* since, as explained before, they are immediately credited to depositors' accounts. It is evident that the bank should secure prompt reimbursement for this outlay of its credit, therefore, every effort is made to secure prompt settlement for all outgoing cash letters.

If either the sending bank or the correspondent maintains an account with the other, the procedure is quite simple; the total of the cash letter is charged to the account.

Items deposited with the local Federal Reserve bank or sent direct to Federal Reserve banks in other districts are charged to a deferred account. After sufficient time has elapsed for the proceeds to be received by the Federal bank, amounts are transferred from this deferred account to the bank's lawful reserve account at the Federal Reserve bank. These transfers are controlled by a time schedule, compiled by the Federal Reserve bank on the basis of its experience as to the average time necessary to handle items on a particular point.

Checks on non-par points and miscellaneous items which are not acceptable to the Federal bank, or checks sent to banks which are not correspondents, present a special problem. Such items are charged to a deferred account until acceptable funds are received in payment. Ordinarily, acceptable funds consist of a banker's check on a local bank, although, if necessary, other arrangements may be made in any particular case.

Another American Gadgets item goes West. Now that the transit machinery has been observed in taking the first American Gadgets item through the banking process, it will be comparatively easy to follow another of the items received in the deposit. This check is the one that was received from Ima Smith, drawn on the Miners State Bank of Reno, Nevada. It is for \$69.14, an amount which, as explained, represents the balance left in the customer's Reno account after a recent sojourn in that city. As the customer owed American Gadgets \$113.13, she gave the firm, also, a check for

\$43.99, drawn on her New York account at the Burnside Avenue branch of the Public National Bank. The Reno item will be followed up first.

When the checks in the American Gadgets deposit are inspected, the Reno check arouses suspicion as it bears evidence of payment having been refused previously because of insufficient funds. It is felt that this check might have enough "rubber" in it to "bounce" again. Accordingly it is turned over to the bank officer in charge of the American Gadgets account. He immediately calls the company and explains that the check is being charged to the firm's account and will be handled on a *collection basis*—that is, the credit to the account, included in the deposit slip, has been immediately reversed, and the check will thereafter be handled on a memorandum basis until actual payment is received.

Individually supervised trips for collection items. In contrast with the transit (cash) item which traveled to Hollywood, merged with many other checks in a cash letter, this check is sent for collection on an individual, almost personal, basis. A specific department, the *country collection*, takes charge of this item and sees that every attention is given to it.

Complete individual records are kept of each collection. Some banks do this by hand, but most use a carbon manifold system. This system is an ingenious method of making all necessary records at one time and with one typing of the essential information. The original is a small letter of instruction, called a *collection letter*, the same size as the accounting tickets used in the bank; this letter is addressed to the collecting bank and accompanies the item. The first carbon copy also goes with the item, and is signed by the collecting bank and returned as an acknowledgment of receipt of the collection.

The six to eight remaining carbon copies are clipped together and filed in a collection department *tickler file*, until needed. While the typing on each of these tickets is identical, the printed forms vary, since they are used for different purposes, as will now be seen.

To return to the check under consideration, it is given to a typist who addresses one of these ticket-letters to the First National Bank of Reno and fills in the blank spaces on the form with complete information and instructions. The original and the first carbon are detached from the manifold group and sent to the collecting bank. (The First National Bank of Reno has been chosen for this service

since it maintains an account with the Honest National, which will thus make settlement easy.)

The remaining tickets are placed in the tickler file to come up for attention in ten days; this period allows sufficient time for the collection to be effected. The acknowledgment is returned promptly, but no further report is received before the expiration of the period. Accordingly, one of the manifold tickets, labeled "Tracer" and bearing a printed request for an immediate report on the item described in the typewritten portion, is forwarded to the collection bank, and the remaining tickets are arranged to come up ten days later.

In response to the tracer, the First National Bank of Reno writes a letter saying it has been advised by the Miners State Bank that the correct balance remaining in the account is \$68.14. The correspondent, therefore, requests authorization to accept payment of \$1.00 less than the face amount of the check. The collection department of the Honest National so advises American Gadgets, Inc., and secures their permission to accept the \$1.00 reduction. This authorization is relayed to the First National of Reno, which collects the check by presenting it over the counter of the Miners State Bank and accepting \$68.14 instead of the face amount, \$69.14.

Advice of payment is soon received by the collection department, which proceeds, as authorized, to charge the account of the First National Bank of Reno for the amount, less a collection charge of \$.50. This charge is made as follows: One of the manifold carbons, labeled "Debit" and printed with a heavy black border around the typewritten name of the First National Bank of Reno, is detached, and the amount corrected by the deduction of the \$1.00 from the face of the check and the \$.50 collection charge. This leaves \$67.64, which is written, instead of the original amount, in the blank space. The ticket is then signed by the collection clerk and becomes the bookkeeper's authorization to charge the account of the correspondent bank.

Similarly, one of the manifold carbons, labeled "Credit" and printed with heavy lines around the American Gadgets' name, is corrected by the deduction of the \$1.00 adjustment, the \$.50 charge of the collecting bank, and the \$.25 minimum charge of the Honest National. This corrected ticket is signed, and serves as authorization for the bookkeeper to credit the deposit account of American Gadgets. A separate ticket is made out for the credit of \$.25 to the exchange account of the collection department.

Still another of the carbon copies is printed as an "Advice of Payment" to the depositor. The amount is changed on this ticket to correspond with the actual credit, and the ticket is mailed to American Gadgets to inform the company that the proceeds of the collection have been placed at its disposal in the deposit account of the company.

This carbon manifold, or fanfold, system has been described at some length, as the principle is used in many departments of the bank.

One check goes to the Bronx, via the clearing house and branch banking. Let us return now to the receiving teller's cage. From here we shall follow the \$43.99 check, drawn on the Burnside Avenue (Bronx) branch of the Public National Bank, through its clerical adventures.

The teller sends this check, with a batch of similar items, to a department which is called in different banks, variously, the clearing house department, the rack department, the internal proving department, and the check desk. Whatever the name, this department sorts into separate packages for each bank all of the cash items drawn on clearing house banks. An adding machine slip totaling these items is attached to each package, and all the packages are sent to the clearing house for exchange, with the other banks, for checks drawn on the Honest National.

Clearing house numbers are used to designate the different banks; thus the National City Bank of New York is referred to as number 8, its clearing house number.

Although the balances at the clearing house are settled only once each day (10 A.M. in New York), checks are exchanged during several stated periods. Many of the larger cities have what are called *night clearings*, and exchange checks shortly after midnight. Nearly all cities have an early morning, or 8 o'clock, clearing so that the other departments, reporting to work at 9 A.M., can begin work promptly on arrival.

The \$43.99 check is delivered with many others to the messenger of the Public National Bank at the 10 A.M. clearing. The check is immediately taken to the head office of the bank, where it is sorted into a group of checks drawn on the Burnside Avenue branch. These checks and various other debits to the branches are charged to the clearance clerk within the bank. This clerk's function is that of clearing for the branches. All debits and credits between the various branches and the head office, and between the branches,

are cleared through this clerk. At the end of the day the \$43.99 check is sent to the Burnside Avenue branch and is charged to Ima Smith's account the next day.

One check goes to Brooklyn—and returns. One of the checks deposited by American Gadgets was an \$8.75 one received from a local college student in payment of a number 4 Tick-Tack-Toe gadget. This check was drawn on the Brownsville National Bank of Brooklyn, which is not a member of the clearing house. Though a non-member, the Brownsville bank has arranged to clear through the Bank of Brooklyn by securing the latter's permission and paying the annual fee of \$1,500 to the clearing house. This check follows the previously described route through the clearing house and the Bank of Brooklyn to the Brownsville National. The latter bank finds that William Student's balance is exactly \$2.89; furthermore, he has taken the precaution to place a "Stop Payment" against this particular check. That is, the bank has been instructed by the depositor to refuse payment on the check and, consequently, must return it to the sender.

As it is too late to return this check through the clearing house at the regular daily clearing of returned items, held at 3 P.M., it is necessary that the check be returned by messenger directly to the Honest National Bank, which now must give in payment cash or a check on its reserve account at the Federal Reserve bank. The item is charged to the American Gadgets account and returned to that company. Thus, within twenty-four hours after the deposit of this check, it is returned to American Gadgets, and they are in a position to proceed legally against Mr. Student for having given them a means of payment which failed.

A note is protested. Associated Gadget Distributors, Inc., a local jobber, has given American Gadgets a promissory note for \$2,000. The note, indorsed by the president of the latter corporation, was previously left with the Honest National Bank, and now matures on the same day that John Graduate makes his deposit. The note is turned over to the city collection department, with instructions to protest non-payment. Difficulty is anticipated on this note (as on all other collection items); therefore, careful attention is given to its handling. Specific instructions are received from American Gadgets, and these are strictly followed.

In handling collections it is essential that presentment be properly made. Consequently the collection department is careful to have the note presented at the place of business of the maker at

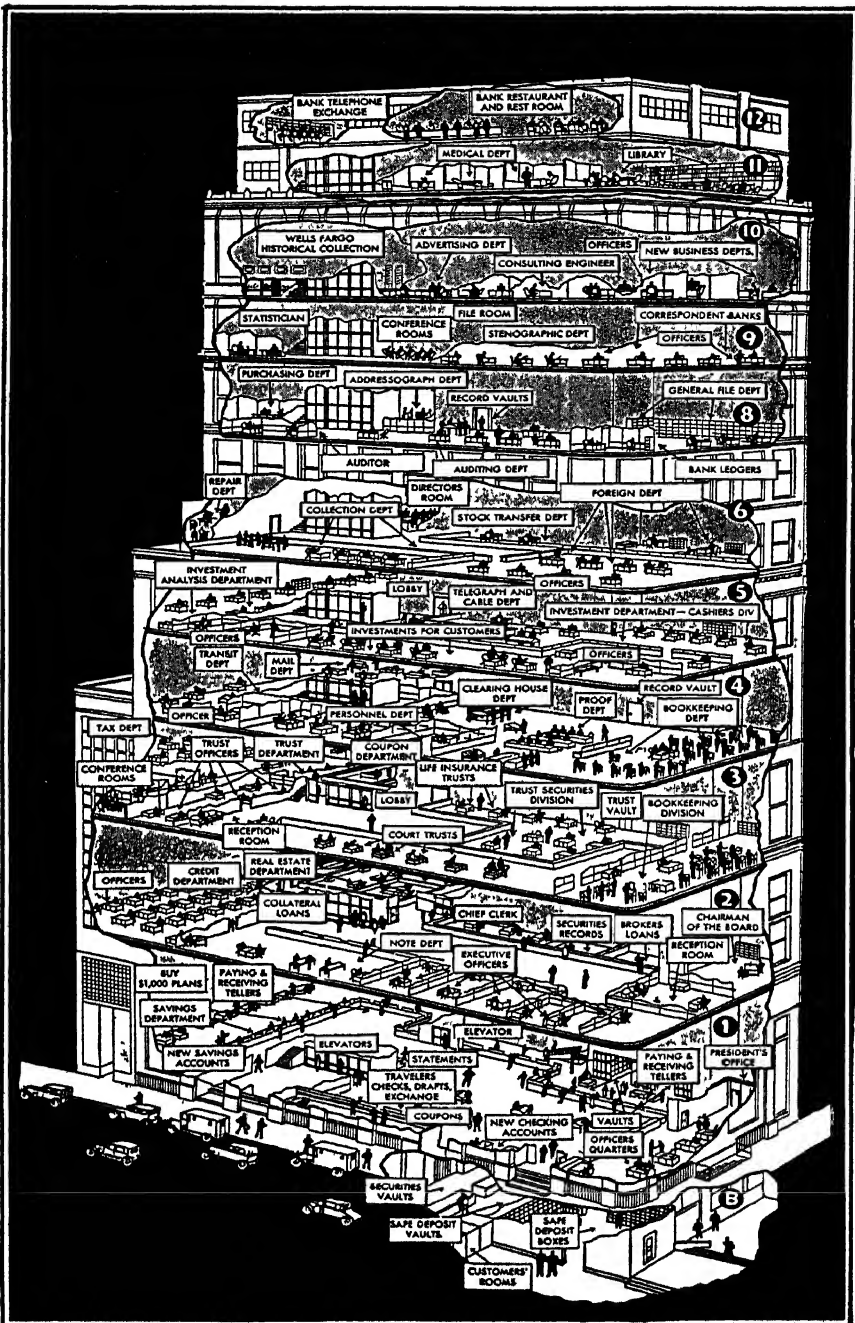
10:30 A.M. and payment in cash or certified check requested. Payment being refused, the check is turned over to a clerk of the bank, who is also a notary, for protest. He thereupon demands payment, and, meeting a similar refusal, formally protests the non-payment and sends a formal notice of protest to the indorser and other interested parties. The protest instrument, hereafter called the *protest*, and the unpaid note are returned to American Gadgets for such legal action as the company desires to take.

While, under the Uniform Negotiable Instruments Act, protest is necessary only on foreign bills of exchange—checks and drafts drawn in one state and payable in another—as a precautionary measure banks uniformly protest every unpaid item larger than \$100 unless they are instructed to waive protest. The effect of failure to protest, when legally required, is to discharge the indorsers from further liability; only the maker can then be held responsible. The protest is also legal evidence that payment has been refused and, in case of suit, makes it unnecessary to put witnesses on the stand to prove presentment and non-payment.

John Graduate returns to the bank. John Graduate has scarcely returned to his office when the president of the company calls him in and asks him to return to the bank to cash a check for him. He asks Graduate if he is known at the bank. John replies in the negative, whereupon the president gives him a letter of introduction, as identification, and suggests that he might well open a personal checking account at the bank. He explains to Graduate that he has urged all of his office employees to maintain checking accounts because of the many advantages which accrue to such depositors. The president suggests that the letter of introduction will make it possible for Graduate to open an account without any difficulty.

John Graduate learns about minimum balances. A suggestion from the chief is a command to John Graduate. He hastens to the bank and presents his letter to an officer who sits at a desk marked "New Accounts." The bank officer asks Graduate to fill out a form, indicating the average balance which he intends to maintain and an estimate as to the number of monthly deposits and checks on the account. In addition, the blank calls for certain descriptive personal data, such as age, names of near relatives, present and former addresses, previous bank accounts, other current bank accounts, and business connections.

After inspecting the completed blank, the officer advises Gradu-



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CUTAWAY VIEW OF A BANK BUILDING

ate that, since a minimum balance of \$5,000 is required at the head office, he will be unable to accept the account. Personal accounts, he explains, are handled much more satisfactorily at one of the branches of the bank. Further, the minimum balance necessary at the branches is only \$200, which is in keeping with the account that Graduate intends to maintain. Since a certain branch is convenient to the latter's home, the officer suggests that he be permitted to arrange the opening of an account for Graduate at that branch.

This arrangement is satisfactory. Graduate signs the necessary signature cards and promises to deposit his next pay check in the neighborhood branch of the bank. Thus John Graduate becomes one of the fortunate 15 per cent of the population which maintains checking accounts.

The bank officer then O.K.'s the check of the president of American Gadgets and introduces Graduate to the paying teller, so that John will have no difficulty in cashing such checks in the future.

Other bank operations. This chapter has been concerned with the deposit, collection, and related operations of commercial banks. It has described a few of the very valuable services which banks render to the business man—services he ordinarily takes for granted. He does not realize the work and expense involved in them. He is prone to think of the bank as a place to secure loans and ignores, or at least fails to appreciate, these vitally important services which are rendered free, or at nominal cost, day in and day out. Important as is the lending phase of banking, modern business could not be conducted without the clerical operations of that stupendous bookkeeping mechanism—the banking system.

Questions for Study and Review

1. Why is it impossible to standardize the internal operations of American banks?
2. What is the function of the deposit slip?
3. An unqualified, legible indorsement is required on each check deposited. Explain.
4. How does the block system of proving differ from the old method?
5. List the advantages of the block system.
6. What unusual features may be observed in the transit department?
7. Differentiate between a transit item and a collection item.
8. Explain the numerical transit system.
9. How do banks secure settlement of cash letters?

AMERICAN GADGETS, INC.

	1946	1945	1944	1943	1942
<i>Fixed Assets</i>					
Land, Buildings, and Machinery (net)	10,841,093	12,613,503	13,383,447	14,058,071	19,196,537
Investments	2,692,180	2,692,180	2,709,607	2,709,649	2,878,276
Other Fixed Assets	5,109,599	5,150,476	5,167,803	5,240,897	369,134
Total Fixed Assets	18,642,872	20,456,159	21,260,857	22,008,617	22,443,947
<i>Current Assets</i>					
Cash	397,039	426,197	359,149	666,799	1,022,064
Accounts Receivable	580,396	655,587	588,980	630,843	694,319
Inventories	7,010,298	4,378,710	5,921,037	8,952,378	7,985,915
Other Current Assets	208,537	152,762	109,910	268,620	226,293
Total Current Assets	8,196,570	5,613,256	6,979,126	10,518,640	9,928,591
Total Assets	26,839,442	26,069,415	28,239,983	32,527,257	32,372,538
<i>Fixed Liabilities and Capital</i>					
Preferred Stock	4,840,000	4,840,000	4,840,000	4,840,000	5,000,000
Common Stock and Surplus	15,033,322	14,418,569	14,561,195	15,814,593	17,891,504
Funded Debt	2,964,100	3,772,000	3,862,500	3,955,000	4,117,000
Reserves	285,451	248,981	253,020	203,406	196,344
Total	23,122,873	23,279,550	23,516,715	24,812,999	27,204,848
<i>Current Liabilities</i>					
Notes and Acceptances Payable	2,100,000	2,000,000	4,378,379	7,175,000	4,625,000
Accounts Payable	343,209	255,717	180,785	300,225	269,977
Accrued Interest, Payrolls, Taxes, etc.	1,273,360	534,148	164,104	239,033	272,713
Total Current Liabilities	3,716,569	2,789,865	4,723,268	7,714,258	5,167,690
Total Liabilities	26,839,442	26,069,415	28,239,983	32,527,257	32,372,538
Net Income	1,058,041	(75,377)*	(1,285,661)*	(1,764,961)*	320,654
Dividends: None					

* Deficit.

10. What is accomplished by protesting an item?
11. Outline the negotiations for opening an account.

Problems

1. On the basis of the data given on page 289, outline the negotiations incident to the opening of the American Gadgets account with the Honest National Bank on December 31, 19—.
2. Outline the "sales" presentation to the bank necessary to get the maximum line of credit *warranted* in the case above.
3. Assume that minimum balance requirements on a checking account are \$200 00 (daily average) and a \$2.00 monthly service charge is in effect at the X National Bank. What is a depositor's net loss (annual basis in per cent) if he permits his average checking balance to drop to \$150 00, rather than make a transfer from a 3 per cent savings account?

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CHAPTER 16

Interbank Relations

Types of interbank relations. The conduct of the business of banking involves many relations and a great measure of coöperation between individual banks. Each bank constantly receives as deposits checks drawn upon a host of other institutions. Cut-throat competition for various types of banking business among individual banks threatens the maintenance of a reasonable level of earnings among banks generally, just as would be the case if unrestricted price cutting broke out in any other line of business. As business concerns expand the scope of their operations, they require banking services covering an ever wider area, which further broadens the geographical scope of the business of their banks.

The chief types of interbank relations to be discussed in this chapter are.

- (1) Local clearings,
- (2) Out-of-town collections,
- (3) Correspondent relations,
- (4) Branch, chain, and group banking.

In addition, through the operation of the Federal Reserve System, the banks of the country are tied together into a more or less unified system in the interests of unified control of the nation's credit structure. This phase of banking coöperation, one of the most important in its economic and social as well as in its financial significance, will be discussed more fully in a later chapter.

Local clearings: the clearing house. Banking entails the use of credit instruments on a large scale. Among bank credit instruments, the most important is the check, but banks are also called

upon by their clients to handle notes and bills of exchange of various kinds.

When a bank sends a credit item to another institution at which it is payable, and asks for cash or its equivalent, the operation is known as *collection*. On the other hand, when two or more banks arrange formally to offset credit items against each other, and settle in cash or the equivalent only any difference or balance that remains, the operation is known as *clearance*. When the collection process is perfected, as we shall see below in the case of the par collection system of the Federal Reserve banks, it takes on increasingly the character of a large-scale clearing arrangement covering a wide area and including large numbers of individual banks.

The clearing house is an agency to facilitate the collection and payment of checks payable by the banks in a community. It provides a central point at which checks drawn on such banks may be exchanged among them. The London Clearing House, the first important agency of the kind, was established in 1775 as an outgrowth of the practice of bank messengers of meeting in a coffee house, to avoid making numerous unnecessary trips, and exchanging checks at this central place. The banks of New York City resorted to this device in 1853. Before that date, each bank would send by messenger checks drawn on other New York banks received by it, and have a porter make the rounds on Friday to pay or receive in coin any resulting balance.

The New York Clearing House was the prototype of American clearing houses. There are now several hundred clearing houses in operation in the United States. Some operate in individual cities. Others are of a regional character, such as those comprising the banks in one county. The regional clearing house usually includes a number of smaller communities that are too small to have clearing houses of their own. Also, in a number of urban clearing houses provision is made for handling checks of banks in the surrounding areas, either by making them clearing members or by providing that they may collect checks deposited with them and receive checks drawn on them deposited with other members through some one member of the clearing house who will act as clearing agent for them for a stipulated fee.

Method of clearing. The basic function of a clearing house is the daily interchange of checks drawn upon each member and deposited with other members, and the settlement of resulting balances due by individual banks to others. Thus, the New York Clearing House conducts a clearing each business day, with four

supplementary clearings on week days. Each bank sends to the clearing house for a clearing a delivery clerk, to present items drawn on other clearing house banks, and a settling clerk, to receive those drawn on his own bank. The settling clerk takes his place behind one of the booths, which are built in a semicircle or horseshoe on the floor of the clearing house. The delivery clerks form in a line at the end of the horseshoe and, at the sound of the gong, they walk around, each depositing with each of the settling clerks a package of checks drawn on his bank. Within a few minutes, therefore, each member bank of the clearing house has received checks drawn upon it and other banks for which it acts as clearing agent. The totals are then verified, it being necessary that all items brought to the clearing house by the delivery clerks should equal all those taken back by the settling clerks. The Federal Reserve Bank of New York then receives from the Clearing House a statement of the amounts by which accounts of the various members should be debited or credited for balances resulting from each clearing, so that all need for the interchange of cash is obviated.

Other clearing houses are largely modeled on the New York Clearing House. When they are not located in Federal Reserve cities, it is common to telegraph to the Federal Reserve bank of the district the amounts by which accounts of member banks should be debited or credited to settle clearing house balances.

Other clearing house functions. While the clearing of checks, notes, drafts, and bond coupons constitutes the basic function of clearing houses, some of them have taken on additional tasks in response to local needs. Clearing houses in many communities have become virtual local trade associations for banks. They furnish a medium through which banks can coöperate in times of emergency when united action is necessary. They set up standards of bank operation and competition. In banking, because of the many risks involved, excessive competition is particularly dangerous.

Among supplementary functions which a clearing house may perform are the following:

- (1) *Bank examinations.* The examination system of the New York Clearing House was long regarded as especially severe and efficient. It has been held responsible in no small measure for the fact that no member of the New York Clearing House failed from the date of its inception to the bank moratorium of 1933. These examinations were abandoned in 1939 because of the extension of examination procedure by the government authorities.

- (2) *Setting maximum interest rates on deposits.* Long before

this power was exercised by the Federal Reserve Board and the Federal Deposit Insurance Corporation, clearing houses kept competition among banks within limits by fixing maximum rates of interest payable on various types of deposits.

(3) *United action to aid weak members.* Except when banking weakness is so widespread as to require more powerful remedial agencies, clearing houses have proved helpful in arranging to aid hard-pressed banks through loans, mergers, or otherwise.

(4) *Uniform trust service charges.* In some communities clearing houses help to maintain bank earnings by setting uniform trust service charges, uniform minimum deposit balance requirements, uniform metered charges for small checking accounts, etc.

Out-of-town collections. The clearing house, as has been seen, has brought to a high state of efficiency the machinery for clearing local bank credit items within a community. However, checks are now used commonly in effecting payments between different communities, so that the problem of out-of-town collections has become a universal one among banks.

To collect such items, a complex system of "correspondent" relationships was built up among the banks of the country after the Civil War. Each institution maintained correspondents in other communities to which checks were mailed for collection. It became common practice for a bank to obtain immediate credit on checks which it sent out through the mails for collection to its correspondents, long before the latter could make actual collection. These checks in process of transportation in the mails, referred to as the "float," thus came to be counted into the reserves of the banks of the country.

Banks receiving items payable out of town even now may impose a *collection* charge on the depositor, owing to the additional work and expense often involved in collecting an item payable at some distant city. Such charges were far more common and were heavier in the past. Also, a bank required to pay an item drawn upon it that had been deposited in an out-of-town bank formerly often deducted an *exchange charge*, on the theory that it had to ship currency or make other special provision for transmitting the amount of the check to the distant point. The combination of collection and exchange charges proved a heavy burden on American business before 1914.

Par collection system. The system of collecting out-of-town items through correspondents has been drastically modified in recent years by the establishment, within the Federal Reserve Sys-

tem, of the par collection system. Under this system, each Federal Reserve bank agreed to collect without charge checks payable at out-of-town banks for member and non-member institutions in its district which would agree to remit at par (i. e., without deduction of exchange charges) the face amount of checks drawn upon them and deposited out of town. Thus, the Federal Reserve banks have become the correspondents of virtually all the important banks of the country, facilitating collection of out-of-town checks and greatly reducing the cost of this necessary service to American business.

Under the par collection system, banks send the great bulk of their out-of-town items to the Federal Reserve banks for collection. Each Federal Reserve bank then separates these items according to the Federal Reserve district within which they are payable, and forwards the items to the individual Reserve institutions. The latter collect these checks by the simple process of debiting the accounts of the various member banks and non-member banks that adhere to the par collection system. In a number of cities, the Federal Reserve bank has joined the local clearing house to facilitate such collection activities. Debit and credit balances of individual Federal Reserve banks resulting from these collection activities are then settled on the books of the Inter-District Settlement Fund in Washington, obviating the need for large currency shipments across country which was a feature of the old collection system.

The Federal Reserve banks give credit to banks that turn over out-of-town checks for collection by them on the basis of a "deferred availability schedule." The map of the country is divided into districts, consisting of concentric circles converging away from the city where the Reserve bank is located. Credit is given within a period of from one to three days, depending upon the city in which the drawee bank is located. Thus, if a New York bank receives a check drawn upon a Los Angeles institution, it will rush this item to the Reserve Bank of New York, and obtain credit, in accordance with the deferred availability schedule, three days later. Of course, if the check is not actually collected for any reason, this credit will be canceled as soon as that fact is learned.

The Federal Reserve banks have opened branches to shorten the time required to forward out-of-town collection items to the Reserve banks. The evolution of air mail has helped to shorten the time that elapses before credit is given on out-of-town items. Also, the Federal Reserve banks have fostered the organization of clear-

ing houses in smaller communities and within rural areas to aid it in collecting such items.

The par collection system is easily one of the major accomplishments of the Federal Reserve Act. It has reduced the cost to business of collecting checks received from out of town, through eliminating exchange charges and requiring that collection charges, which are still permissible, be "reasonable" in amount. It has largely eliminated the float, expedited collection, and made the whole process of out-of-town check collection systematic and certain through the deferred availability schedule. It has in large measure eliminated such objectionable banking practices as giving correspondents immediate credit on checks placed in the mails, and largely reduced the amounts of interbank balances that arise from out-of-town collections.

The collection process. Banks which are members of local clearing houses sort checks deposited with them into two major groups—those which will be sent to the clearing house, and out-of-town items. Before the inauguration of Federal Reserve clearing, these out-of-town items would be sorted according to the geographical location of the banks on which they were drawn, and they would be sent to correspondent banks located nearest those institutions. Thus, a New York City bank might send to its New Orleans correspondent all checks deposited with it drawn upon banks in the Southwest. Since banks, in their eagerness to attract other banks as customers, often made special concessions to out-of-town institutions which used them as clearing and collection agents, the result was a great deal of circuitous routing of checks.

At present, banks which belong to the par collection system use their Federal Reserve banks for the most part to collect out-of-town checks drawn on banks which pay the face value of checks drawn upon them, without deduction of an exchange charge. Regulation J of the Board of Governors of the Federal Reserve System provides, however, that "no Federal Reserve bank shall receive on deposit or for collection any check drawn on any non-member bank which can not be collected at par in funds acceptable to the collecting Federal Reserve bank."

If the First National Bank of Fort Mott, Texas, for example, receives \$12,400 in checks drawn upon other par-remitting banks in the Dallas Federal Reserve district on a given day, it will forward them to the Federal Reserve Bank of Dallas for collection. The latter, in turn, will debit directly the accounts of member and

clearing non-member banks by the amounts of these checks, and credit the First National of Fort Mott with corresponding sums, either immediately or in accordance with its deferred availability schedule, depending on the location of the paying banks. Similarly, other banks in the district have forwarded to the Federal Reserve Bank at Dallas checks they have received drawn upon the First National of Fort Mott. If these aggregate \$11,600 for the day, the First National's account at the Federal is debited by this amount, resulting in a net increase of its balance with the Federal of \$800. These checks are then debited to the accounts of the individual depositors by the First National, which returns them to the depositors at the end of the month with their monthly statements.

The Federal Reserve Bank thus acts, in effect, as a clearing house for the member and clearing non-member banks of its district.

In addition, each Federal Reserve bank collects checks payable at par-remitting banks in other districts for members and clearing non-member banks. For example, if a merchant in a California resort town receives a check drawn upon a bank in Boston, he will deposit it with his local bank. The latter will probably forward this check to the Federal Reserve Bank of San Francisco. Let us assume that the San Francisco Reserve bank, in the course of the day, receives \$2,100,000 of checks drawn upon banks in the Boston Federal Reserve district. These are shipped to the Boston Reserve bank, and the banks in the San Francisco district, including the one at the resort town in question, receive deferred credits, available at the end of three days, on the books of their Reserve bank for these checks. When these checks are received in Boston, the Reserve bank there wires the inter-district settlement fund in Washington to debit its account and credit that of the San Francisco Reserve bank by the amount of \$2,100,000, representing the checks shipped. The Boston Reserve bank thereafter sends to the individual banks in its district the checks drawn on them received from the San Francisco Reserve bank, and these institutions in turn debit their customers' accounts for the sums involved.

A number of banks still send out-of-town checks for collection to their correspondent banks in some centers, because of the added clerical service and the earlier credit they usually obtain from them in connection with such direct collections.

Correspondent relations. The collection of out-of-town items was only one reason for the maintenance of correspondent relationships, however, and so even after the par collection system was

firmly established correspondent relations have remained quite important.

Correspondent relations are particularly important in the United States because of the persistence of the unit banking system in this country. Many services which banks must perform for each other are arranged in this way, rather than through common ownership of numerous banking offices, as is the case under a branch banking system.

These relations assume three main forms. In the first place, there are the direct banking services which one bank will perform for another. Besides the collection of checks and other types of credit instruments, these include the placing of money on call on stock exchange collateral, the making of bond investments, handling of foreign exchange transactions, etc. The most common form which such correspondent relations assume is where the city bank acts as correspondent for a large number of widely scattered country institutions. Some city banks act for as many as 3,000 country banks, helping them to choose their investments, placing their surplus funds on call, arranging foreign exchange and letter-of-credit transactions for them, etc. The city bank benefits from such relations not only through fees charged for certain types of service, such as the arrangement of letters of credit, but also through holding deposits for country institutions. In order to obtain these services, country banks maintain demand deposits with city correspondents, even though no interest may be paid upon these balances under the provisions of the Banking Act of 1933.

A second element in the correspondent relationship is the advisory function which the city bank performs for out-of-town institutions. Possessing a much larger and more specialized staff, and often maintaining an economic or service department as well, the city institution is often called upon by the country bank for advice as to general banking policy, security investments, lending policies, etc. Country bankers also use their city correspondents as headquarters in visiting metropolitan centers and in getting a broader view of economic trends and conditions there.

In the third place, the country bank often looks to its city correspondent for aid during an emergency. During the bank failure epidemic in 1931 and 1932, many city banks advanced funds to correspondents on collateral which was not eligible for rediscount at the Federal Reserve banks. Of course, when conditions become quite bad and the risk involved appears to be unduly great, the city

bank will, in self-protection, limit such aid to that which can be secured by unquestionable collateral. In the main, such help will then take the form of lending on listed or gilt-edged unlisted securities on a conservative margin basis. The liberalization of the rediscount restrictions of the Federal Reserve banks by the Banking Act of 1935 tends to make this aspect of correspondent relations less important than was the case formerly. On the other hand, country banks still call on city correspondents for help in making large loans and undertaking other transactions for which their own resources are not adequate.

The correspondent relationship, it will thus be seen, possesses a broad basis. Hence, it persists despite the fundamental changes effected by the Banking Acts of 1933 and 1935 and the taking over by the Federal Reserve banks of many functions which city banks formerly performed exclusively for their correspondents. Only the general introduction of branch banking, it would appear, can greatly limit the importance of close relations between individual institutions, and especially between small banks and the large institutions located at metropolitan centers of population, unless these relations are broken by regulation.

The argument has been advanced that correspondent relations tend to interfere with control over the activities of individual banks by the regulatory authorities. For example, it has been pointed out that withdrawals of deposits from city banks by out-of-town correspondents early in 1937 exaggerated the effect of the increase in legal reserve requirements ordered by the Board of Governors of the Federal Reserve System at that time. Metropolitan banks found themselves forced to sell large amounts of investments, forcing down bond prices in a way that was not at all contemplated by the Reserve Board when the rise in reserve requirements was decided upon.

It has been proposed by critics of correspondent relations that a reserve of 100 per cent be required against interbank deposits, or that some other measure be taken to compel banks to keep their surplus funds with the Federal Reserve banks rather than with correspondent institutions. If this were done, city banks could perform services for correspondents only for a fee, instead of relying upon compensating deposit balances, as at present. Furthermore, the nation at large would lose in part the many benefits now derived from the existence of major money centers like New York and Chicago, which depend to a considerable extent for their importance

upon the fact that their banks hold large amounts of surplus funds for out-of-town banks. Financing by the United States Treasury would be particularly hampered by the curtailment of the resources of the great financial centers, which often absorb the bulk of new Government bond issues in the first instance and then gradually distribute them over a period of time among institutional and individual investors throughout the country.

Banking concentration. An outstanding characteristic of modern economic development, particularly in the United States, has been the concentration of business activity in large units under single ownership. First the railroads, and then the oil, tobacco, distilling, steel, and other major industries, underwent extensive concentration, as a result of which a relatively small number of large enterprises have come to dominate in them. This combination movement now embraces most of the leading industries of the country to a greater or less degree.

Since the banks are deeply affected by the nature of the business they are called upon to finance, the evolution of large industrial and commercial units has in turn called for large banks. Furthermore, a number of advantages in the way of efficiency, economy, and safety are realized in carrying on the business of banking on a larger scale, particularly where this is done competently. To counterbalance these gains, of course, there is the disadvantage of the absence of personal contact between the management and the rank and file of customers in very large banks. Unlike other industries, the banks have found that the trend toward concentration has been especially hampered in their case by legal restrictions. Accordingly, banking has lagged far behind in the concentration movement in American economic life, and branch banking has made much less progress in this country than in most others.

Types of banking concentration. There are four chief ways in which banking enterprises may be brought under single control and management. These are:

(1) *Merger.* Under a merger, there is retention of but one banking name by the combined institution. Provided the provisions covering bank consolidations in Federal and State laws are followed, there is no legal obstacle to this type of concentration. In such cases, two or more banks are combined so as to form a single entity, after the directors have reached an agreement as to terms and the stockholders have given their approval in the manner provided by State laws for State banks and by the National Bank Act for national institutions.

(2) *Branch banking.* In this case, two or more banking offices are operated under single ownership and as a single institution. National and State banking laws now define branch banking powers and restrictions definitely in most cases.

(3) *Group banking.* Group banking consists of the ownership and operation of two or more banks by a holding company. Usually, a single large city institution constitutes the nucleus of the system, although it is itself controlled through stock ownership by the holding company just like the other banks in the group.

(4) *Chain banking.* While not always distinguished from group banking, the term "chain banking" is usually reserved for instances where two or more banks are controlled by a single person or group of persons through stock ownership or otherwise. This constitutes a looser and less formal arrangement than group banking, and is considerably less important.

Development of branch banking. Branch banking enjoyed a considerable development in the United States before the Civil War. The first and second Banks of the United States had branches, and a number of State banks, particularly in the South and West, maintained multiple offices.

The Civil War marked the culmination of this early era of branch banking in the United States. In the first place, a number of southern branch banks went out of business as a result of disastrous currency inflation under the Confederacy. Second, and more important, the National Bank Act of 1863 did not provide for branch banking. Although a State bank converting into a national institution could retain its branches under stated conditions, these restrictions were so onerous that the branch bank systems of the day almost invariably converted each branch into a separate national bank. Thus, in the late 'sixties branch banking, along with State banking, largely disappeared from our national horizon for a while.

There was a revival of interest in the subject, however, during the 'nineties, coincident with agitation for more numerous banks to serve small communities and a renewal of bank failures. However, instead of liberalizing the laws as regards branch banking, the minimum capital requirement for new national banks was lowered to \$25,000 for small communities, and some States made it as low as \$10,000 for State banks. As a result, unit banks rather than branches of larger institutions were established in rural areas to meet the vocal demand for local banking facilities.

The modern era of branch banking in this country may be said to date from the enactment in 1909 of California's law permitting

banks to maintain multiple branches. Since then, California has enjoyed a development of branch banking comparable with that of most other countries. The Comptroller of the Currency ruled in 1922 that national banks could maintain additional *offices* in the city where they are located, where State laws do not specifically bar them. The banking laws of 1927, 1933, and 1935 contained provisions designed to give national banks branch privileges comparable to those enjoyed by State banks in each jurisdiction. However, national banks maintaining branches must now have at least as much capital as would an equal number of independent banks. In the meantime, there has been considerable liberalization of State laws on the subject also, particularly as a sequel to the bank failure epidemic of 1930-33.

The status of branch banking laws of the various states was summarized as follows by the Federal Reserve Bulletin for October, 1939:

SUMMARY OF STATE BRANCH BANKING LAWS

<i>States Permitting State-Wide Branch Banking</i>	<i>States Permitting Branch Banking within Limited Areas</i>	<i>States Prohibiting Branch Banking</i>	<i>States with No Legislation Regarding Branch Banking</i>
Arizona	Alabama	Colorado	Kentucky ¹
California	Arkansas ²	Florida	New Hampshire
Connecticut	Delaware	Illinois	Oklahoma
District of Columbia	Georgia	Kansas	Wyoming
Idaho	Indiana	Minnesota	
Louisiana	Iowa ²	Missouri	
Maine	Massachusetts	Nebraska	
Maryland	Mississippi	Texas	
Michigan	Montana	West Virginia	
Nevada	New Jersey		
North Carolina	New Mexico ²		
Oregon	New York		
Rhode Island	North Dakota ²		
South Carolina	Ohio		
South Dakota	Pennsylvania		
Utah	Tennessee		
Vermont	Wisconsin ²		
Virginia			
Washington			
Total, 19	Total, 17	Total, 9	Total, 4

¹ Court decisions permit establishment of offices or agencies to receive deposits and cash checks

² Only "offices," "agencies," or "stations" for limited purposes, as distinguished from "branches," permitted under certain circumstances

NOTE.—The foregoing tabulation does not reflect detailed provisions of the law in certain States, such as restrictions based upon the population of the place of the head office or the place of the proposed branch, restrictions that certain branches be established only by consolidation or merger, requirements that the place of the proposed branch be without other banking facilities, etc. For example, the State of Virginia is classified in the foregoing tabulation as a State permitting State-wide branch banking, but under the laws of that State branches may be established only in "other cities having a population of not less than 50,000 inhabitants." For such detailed provisions, reference should be had to the compilation of the laws of the individual States published herein.

Pros and cons of branch banking. Most countries of the world have adopted branch banking as the soundest and most suitable system under modern conditions. In certain cases, as in Great Britain, branch banking developed because numerous small independent banks could not withstand the pressure of recurring depression periods. In more recent times, wholesale failures of unit banks in Japan, Norway, and the United States, countries that have retained unit banking systems, brought about an extension of branch banking in these countries. On the other hand, where branch banking systems have got into trouble, as in Germany in 1931, it has been easier to readjust their affairs so that they could continue to serve the public with but a short interruption.

The chief arguments for branch banking, especially under American conditions, are:

(1) A branch banking system is better able to withstand depression conditions than are unit banks. Funds can be rushed to particular branches where depositors are withdrawing funds most freely. Bank failures tend to be contagious, in that the collapse of one institution causes unrest among depositors, so that runs spread among neighboring and even distant banks. Hence, in so far as branch banking prevents failures of particular institutions, it contributes toward making less likely a repetition of a wholesale and nation-wide failure epidemic, such as that of 1930-33.

(2) Branch banking imparts diversification to the business of banks. It makes individual banks less dependent upon particular neighborhoods, communities, or industries.

(3) Branch banking makes possible a higher average quality of management. A large branch banking organization can afford to retain experienced and competent officers, while a great part of the business of the individual branches will be placed on a routine basis and standardized.

(4) Branch banking makes possible economies of operation.

(5) Customers of branch banks in small communities can be given a complete banking service and may borrow up to large amounts if their condition warrants. Small unit banks are not in position to grant large credits, because of the fact that they can normally lend to one customer only 10 per cent of capital and surplus.

(6) Branch banking provides a check on the extent to which the demands of a community for credit are fulfilled. Where the business men of a town run the bank, they may have exaggerated no-

tions at times of the extent to which they are entitled to credit for their enterprises.

(7) Government regulation of banking is facilitated.

The chief arguments against branch banking are:

(1) The management of individual branches may be brought down to a dead level of routine, so that insufficient consideration is given to the particular financial needs of individual communities. The argument is often advanced that Canada's economic development has been seriously hampered, in comparison with that of the United States, by her well-developed branch banking system. Managers of individual branches, it is argued, are given little scope for initiative, all important decisions being concentrated at the main office. As a result, the special needs of local individuals tend to be ignored, and many enterprises that could otherwise be developed fail to get reasonable financial assistance so that they can be started.

(2) The funds of the community, received by branch banks as deposits, are sent to the financial centers for investment, and so are lost as far as local economic development is concerned. While it is true that this concentration of funds in large centers occurs under the correspondent bank system, it is naturally more pronounced when local banks are mere branches operated by a central office which often is more interested in making large loans and investments from the main office than in concerning itself with innumerable small, individual commitments through the various branch offices.

(3) When a branch bank system does fail, it involves a far greater catastrophe than is the case with suspensions among a large number of small, independent unit banks. Thus, if in a given area there are sixty individual banks, it is quite unlikely that all of them would fail at once. On the other hand, if all sixty should be acquired by a single institution and be transformed into a branch banking system, the failure of the latter would constitute a major disaster for the community involved, for every one of these banking offices would then be closed.

(4) The transition to branch banking creates a number of difficult problems for existing independent unit banks because of the formidable competition thus created for them. When a unit bank is confronted with the competition of a branch office of a large city bank which is opened across the street, it may find itself at a very

serious competitive disadvantage. The branch of the large bank may attract deposits and other business away from the small unit institution because of its wider service, larger resources, and ability to operate the branch, at least for some time, at a loss. This may jeopardize the future profitable operation of the unit bank even though up to that time it was a successful institution giving good service to its community.

The rôle of group banking. Group banking has enjoyed a more important place in this country than elsewhere because of the rigid restrictions that have been placed around the evolution of branch banking under State and Federal laws. By forming a holding company not subject to these legal restrictions, it has been possible to secure some of the advantages of branch banking, such as uniform control of management and diversification of operation, within the limitations of the law.

Certain important groups which developed in the northwestern states shortly after World War I have had a splendid record and doubtless reduced the number of failures that occurred in that section of the country during the bank failure epidemic of the early 'thirties. But the record has been by no means a uniformly satisfactory one. A number of groups, including a few large ones, failed to survive the deflation period which followed 1929. Furthermore, where one bank in a group failed, it was usually impossible to save the other institutions because in the public mind they were all grouped together. Hence, group banking proved a factor of weakness as well as strength. This consideration has made it evident that with the privileges of group banking should go some measure of responsibility.

As a result, the Banking Act of 1933 for the first time provided a degree of regulation of corporations that control group banks. Under this law, a group bank holding company is designated as a "holding company affiliate," and as such is required to obtain a license from the Board of Governors of the Federal Reserve System before it may vote stock of national banks or State member banks. Furthermore, the holding company affiliates must agree to subject themselves to the provisions of the banking law applicable to individual banks, such as prohibition of the maintenance of security affiliates, and they are required to build up reserves in the form of cash or readily marketable assets that will eventually equal at least 12 per cent of the aggregate par value of the bank stock owned by

them. In this way, it is sought to assure that the holding company will be a source of strength rather than weakness to the individual banks which it controls.

Group banking in several parts of the country appears to be a transition phase between unit banking and branch banking in the evolution of the American banking system. Until such time as a major relaxation occurs in the restrictions and prohibitions that are imposed upon branch banking in many states, group banking is likely to remain an important type of interbank relation.

Questions for Study and Review

1. What are the four chief types of relations between individual banks?
2. Distinguish between collection and clearing. Which tends to be more important under modern conditions?
3. Describe the problem of the collection process as it is carried on at the local clearing house.
4. What are some other major functions that a clearing house carries out in addition to the clearing of checks?
5. What is meant by "float"? What dangers did it involve before the Federal Reserve System was established?
6. What are the advantages conferred by the par collection system? Is this system open to banks that are not members of the Federal Reserve System?
7. Distinguish between "collection" and "exchange" charges. To what extent are business concerns subject to them at the present time?
8. To what extent is branch banking permitted at the present time?
9. Give three advantages and three disadvantages of branch banking.
10. What is group banking? How does it differ from chain banks and branch banks?

Problems

1. The Warren National Bank has a branch with \$1,000,000 of deposits. It earns an average of $2\frac{1}{2}$ per cent on its deposits. Total branch expenses are \$17,000 per year, including allocation of overhead expenses. The branch is of some value as a source of trust and foreign exchange business, profits from which are absorbed in the head office. What does the branch earn? Would you advise its continuance?

2. A given state does not permit branch banking. How can a group of unit banks in the state be organized into a group banking enterprise? What procedure would you follow in promoting such a group?

3. The National Industrial Bank of New York wants to increase the number of its correspondents. What services can it offer to obtain out-of-town balances? Should it send salesmen out to solicit country bank accounts?

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CHAPTER 17

Bank Examinations, Audits, and Reports

An American fetish or necessity? Foreign students of banking are amazed and confounded by the extent and multiplicity of banking supervision in the United States. Since commercial banks in democratic countries are normally accustomed to almost complete freedom from government regulation and interference, these students find it difficult to comprehend the elaborate system of banking supervision and examination that has grown out of bitter experience through many decades of trial and error in American banking. Their first reaction is that the American banker must be less honest than those abroad if it is necessary to subject him and his business to such detailed and unremitting regulation. Further study, however, will disclose basic factors in American business methods and in American "psychology" that warrant a considerable degree of government supervision, almost regardless of the honesty of individual bankers or the nature of our banking system.

The Americans, as a people, are speculatively inclined, optimists by choice and "empire builders" by environment. Even despite governmental supervision and regulation, their enthusiasm has led repeatedly to credit excesses and subsequent economic misery. As long as American banks are run by persons imbued with this spirit, banking standards set by law and enforced through examinations will be necessary. This is not a reflection on American honesty; it is, rather, a frank recognition of the predisposition to overexpansion inherent in the American temperament.

In addition, the American system of free unit banking requires far more oversight and control than is necessary in countries that severely restrict or, as a practical matter, prevent the formation of

new banks. Thus, while control in most countries is exercised *before*, control in the United States is attempted *after*, formation. This factor alone abundantly justifies the work of the supervisory agencies; it also immeasurably increases and complicates it.

The reader should note that these observations justify the *principle* of examination and supervision for American banks. In practice, both examination and supervision have fallen far short of what reasonably might have been expected. That, however, has been a fault of *quality* and not *quantity*. It is apparent to any unbiased observer that the red tape and "busy-work," the duplications and expense involved, might well be drastically reduced, with an actual increase in effectiveness and all-round protection to the public. It is safe, even if dogmatic, to assert that what is needed is *better* supervision, not *more* supervision, although the recent political and legislative trend has been in exactly the opposite direction.

Public nature of banking. Legally, banking is not a *public utility*, since it is not a monopoly. Measured by the other criteria applied to public utilities, however, banking falls in the same general field. The regulation of banking, nevertheless, does not involve the fixing of rates by the Government (except interest paid on deposits), as in the case of the public utilities. Interest rates and charges are fixed by competition and, to a limited extent, by coöperation through clearing houses. Maximum and minimum standards, from the standpoint of safety and public interest, are set by statute and supervisory officials.

The State is fully warranted in its attempt to regulate banking, provided that regulation is always kept out of politics (an impossibility, at times, in a democracy). The extension of loans has an immediate and direct effect on prices and business activity. Furthermore, banks actively participate in the money market and the bond market, and thus actively influence Government financing and fiscal policy. In all of these things, the Government has a legitimate interest and may properly protect itself within the limits of economic law and safety.

From the franchise standpoint, banks have received a valuable privilege from the Government. They have been given the credit money "concession." Orders (checks) on the banks are permitted to circulate as a modified type of money, and do approximately 95 per cent of the money work of the country. In earlier days, this function of furnishing the mediums of exchange was a jealously guarded prerogative of sovereignty. Nowadays, however, banks

are permitted, within the limits of safety (and often beyond the limits of safety), to furnish the most important medium of exchange and to charge interest for so doing. Abstract though it may sound, this delegation of privilege not only gives the Government the moral right to provide, but it imposes the serious responsibility of providing, strict regulation of all such credit institutions.

Is regulation successful? Regulation has not prevented credit excesses, nor has it eradicated other banking abuses. Despite regulation, bank failures continued to mount year after year until the formation of the Federal Deposit Insurance Corporation in June, 1933. In fact, more than half of the total number of banks in the United States failed or liquidated in the twelve years immediately preceding the formation of the Corporation. On the surface the record of regulation looks black indeed.

However, banking in recent years has been at the mercy of almost *elemental* economic forces loosed by World War I. In the grip of these mighty economic tides, nothing short of a too benevolent Deity could have saved thousands of the weaker banks. Surely their elimination, a plain matter of the working of economic law, cannot be charged to the failure of regulation.

This conclusion does not imply that bank supervision has been perfect, or even successful. But the defect has not been in the principle or in the aim of regulation. The mechanics of regulation have, in certain respects, been at fault. Probably the greatest shortcoming has been in the choice of men to administer the various supervisory agencies. Political considerations have often dictated the appointment of weak or incompetent administrators.

While the record of the bank examiners themselves is unbelievably clean, the same cannot be said for those of executive rank in the various banking departments. In New York State more than one superintendent of banking has been sent to Sing Sing for bribery, fraud, or other crimes. Throughout the United States many supervisory officials have proved unable to withstand the temptations inherent in their duties.

The laws governing banking have generally lagged far behind actual developments in the field. Legislation has been possible only after the banking structure has been subjected to cataclysmic upheavals. Invariably the door has been locked after the horse was stolen. There has been no policy with respect to banking legislation. Obviously the supervisory authorities can do but little to remedy this situation. They often do not dare to point out the

defects and to make recommendations for fear of the adverse effect that their proposals may have on the credit structure of the country.

Latterly, however, there has been a surfeit of banking legislation which should strengthen and improve regulation in the future. Excepting, always, political interference or actual domination, banking supervision of the future should be infinitely better than in the past.

Purpose of banking supervision. *Protection of depositors* is the primary concern of banking supervision. Thus the examining authorities first determine if the assets are *intact*. They then endeavor to ascertain if the assets are *sound*. Even more, they sit in judgment on the policies of the institution under examination, to determine whether they are safe and warranted by current conditions.

Stockholders, likewise, benefit from these official examinations. However, their protection is but an incidental by-product of the main object—protection of depositors.

Strict supervision and maintenance of sound standards likewise directly benefit the Federal Deposit Insurance Corporation, which has a financial interest in the success or failure of all insured banks.

Compliance with the law is the other chief goal of bank supervision. The nature and the extent of the work involved in this aspect of the duties of the supervisory authorities are not generally appreciated. As described in an early chapter of this book, a great deal of work devolves on these authorities in the investigation and authorization or disapproval of all requests for bank charters. Organization of new banks is hedged around with elaborate safeguards which must be administered by government officials.

After the organization is completed, there are literally hundreds of statutory prohibitions and duties imposed on the management. The Banking Act of 1933 alone contains enough flats and “thou shalt not’s” to keep management, lawyers, and supervisory authorities busy for a long time in application, interpretation, and adaptation. Even with vigilant supervisory officials, many of the banking statutes are not fully or faithfully observed. Without some means of check, the resultant chaos can be imagined.

Supervision of early American banks. The earliest American banks were completely free of supervision and regulation.

The first Bank of the United States was required by charter to make reports of its condition to the Secretary of the Treasury.

While these reports were undoubtedly made, they were never published. Consequently, the public was unable to obtain any facts about the bank and its operations.

The charter of the second Bank of the United States contained a similar provision; the results were identical. But, having encountered difficulties in an investigation of the first Bank of the United States, Congress, in chartering the second Bank, reserved the right to examine at any time all books and proceedings, in order to determine whether charter provisions had been violated. This reservation of the right of visitorial power is interesting, as it was accomplished through the charter and not by specific statute. Furthermore, it was concerned only with charter violations; examination of the assets and policies to determine the soundness of the bank was not even contemplated.

The legal right of the Federal Government and the State governments to enact laws regulating banking and providing for examinations was not established until considerably later. The National Bank Act of Civil War times incontrovertibly set a precedent and standards in this respect, which, with minor changes, are followed to this day.

Supervising authorities. Since certain of the supervisory authorities do not possess the power of examination, and some of the examining authorities have a minimum of supervisory responsibility, these two functions will be discussed separately even though they are closely interrelated. Recently, the supervisory authorities have been very much in the forefront, and their power has been greatly increased. Consequently, they will be discussed before the examining authorities are listed.

The term *supervising authority* should be understood to mean any outside agency or individual that has the power, legal or otherwise, to control directly any phase of commercial banking activity. This is a much broader definition than has heretofore been conceded to the term. Recent development, however, fully warrants the inclusion of many agencies that ordinarily would not be thought of in connection with bank supervision. A summary of the reasons for including these agencies will be given in each instance.

The *Comptroller of the Currency*, historically and legally, should head the list of Federal supervisory authorities; law and precedent are with him. But some of the new stars in the banking firmament far outshine his office in authority, prestige, and responsibility.

In the tragic days of March, 1933, the Comptroller was completely eclipsed by the President of the United States, with his executive declaration of a banking holiday. Furthermore, the Secretary of the Treasury took up where the President left off and exercised such further executive authority as he deemed expedient under the circumstances of that time. The Comptroller's office has not regained the status it enjoyed before the banking crisis.

The *Board of Governors of the Federal Reserve System* and the twelve *Federal Reserve banks* are now authorized by law to carry on many of the functions of regulation and supervision which logically would seem to attach to the office of the Comptroller. Thus the Board of Governors supervises interest rates on time deposits, enforces the prohibition against payment of interest on demand deposits, passes on the legality of affiliates and interlocking directorates, and administers many other provisions of banking law. While the authority of the Board is limited to *member banks*, the group includes all those banks for which the Comptroller is responsible (national banks) and many of the state banks. This is undoubtedly the reason for saddling such responsibilities on the Board rather than on the Comptroller. The result, nonetheless, is divided authority, considerable confusion, and a great decrease in the prestige of the Comptroller's office.

The Reconstruction Finance Corporation, through its holding of the preferred stock and capital notes of banks representing the investment of the Government was for some time in a position to exercise tremendous influence on banking policy and activity. The Corporation, according to its chairman, however, made little use of its power of direct control. As nearly all of this capital has been repaid, the importance of its influence has sharply declined. In any event, the Corporation makes certain stipulations regarding accounting and dividend procedure, as well as executive salaries, in any bank to which it has supplied capital. In addition, the powers of the Corporation are greatly increased over its banks if they get into financial difficulties.

In the banking field the *Federal Deposit Insurance Corporation* is another Government agency which has a great deal to say regarding the conduct of the business of insured banks. The Banking Act of 1935 gave the Corporation additional powers over insured banks. Present indications are that the Government aims to make the Corporation one of the chief supervisory authorities.

The measure of supervision exercised by *Senate* and other *Congressional committees*, through the use (and sometimes abuse) of their inquisitorial powers, is not generally appreciated. The bankers have been particularly respectful of Congressional authority since the "Inquisition" of 1932-1933. The financial world has learned to dread the fire of such investigations. Boards of directors and counsel of banks are now chary of approving anything which could be exploited by future committees. These investigations and the possibility of new inquiries at any time have undoubtedly had a salutary influence on bank management. Parenthetically, it may be said that bankers now use the telephone for many matters which used to be settled by letters or telegrams before the Washington committees became so inquisitive.

State supervision is usually the function of the superintendent of banks, the state auditor, or some other appropriate official. Although there is no particular uniformity as to title, the duties and responsibilities of this banking official within the state correspond to those of the Comptroller of the Currency with respect to national banks.

The banking crisis of 1933 forced the governors of most states to establish a temporary measure of control over banking, as was done by the executive arm of the Federal Government. Various other officials took it upon themselves to interfere at that time, although they had no legal authority for their acts. An Ohio mayor used the police force to prevent anyone from entering the banks in his city, and thus forced banks to close. Practically all of this executive supervision (or interference) was born of the hysteria of the time and has since diminished.

Paradoxically, the most effective supervision is that practiced by the banks themselves through coöperative methods. The success of city clearing houses in determining the rules of the game and thereafter keeping the banks within bounds is well known. The clearing house idea was extended a few years ago to country banking problems, with considerable success. These new regional clearing houses, wherever tried, have raised banking standards and increased the safety of depositors' funds.

Federal examining authorities. In the general management of his office, the Comptroller of the Currency is aided by deputy comptrollers. The bank examination function, however, is presided over by the Chief National Bank Examiner, who is directly responsible for all examining activities. Each Federal Reserve district

has a national bank examiner who is in charge of all the other examiners assigned to his district.

Examiners are appointed after rigid Civil Service examinations. They hold office "during good behavior" until retirement age. This qualification means that they are, theoretically at least, immune to political pressure. In all fairness it must be said that their record for honesty and fidelity is unexcelled in the field of public servants. The examiner has, practically without exception, measured up to the high trust and responsibilities of his office. Such shortcomings as have come to light in the field of examinations have been in the higher ranks.

The Comptroller of the Currency is required by law to examine every national bank twice in each calendar year, or oftener if he deems it necessary. The heart of the national examination is a balance sheet audit. The national examiners start their examination without any preliminary warning, a great deterrent to defalcation. The surprise element in their visits has aided many a clerk and officer to stay on the street called "Straight." Balance sheet audits, similar to those made by the examining authorities, are explained in considerable detail later in this chapter.

The Federal Deposit Insurance Corporation, when it began to function in 1933, faced the greatest examination task in history. Starting from scratch, the Corporation was supposed to develop an examining group and examine some 14,000 banks within the short period of a few months. Added to this obvious impossibility was the further complication of the legal provision permitting banks to enter the temporary insurance fund, even though their capital would have been completely wiped out by a valuation of their assets at current prices. Other examining agencies aided the FDIC in its predicament by lending expert examiners and supplying copies of most recent examinations of the banks under their respective jurisdictions. In one way or another, the banks were finally examined (after a fashion) and the temporary insurance fund began to function on January 1, 1934.

The Federal Deposit Insurance Corporation examiners may examine any state non-member bank which is insured or making application for insurance. Upon securing the written consent of the Comptroller of the Currency, they may examine any national bank and, with like permission from the Board of Governors of the Federal Reserve System, any state member bank. They may also examine *any* closed insured bank.

The whole examination situation is very unsatisfactory, and legislation to rectify it is needed. Whether this will mean that the FDIC will ultimately take over the examining function *exclusively* remains to be seen. Everyone is agreed that the present situation is intolerable and that something must be done to simplify, clarify, and reorganize the whole scheme of Federal examination.

Each Federal Reserve bank maintains a bank examination department to examine the member banks in its district. It is the practice of this department to secure a copy of the report of each examination of the national examiners, and this report is carefully analyzed. Generally it is not necessary to investigate further in the case of national banks. However, if the report should indicate that the national bank is in a weakened condition or is engaging in unsound banking practices, the Federal examiners call on the bank and investigate further the points which have been questioned.

The Federal Reserve bank may also send its examiners into any member bank at any time if there is occasion to believe that Federal Reserve credit is being improperly used.

Heretofore, the Federal Reserve banks have conducted their own examinations of all state member banks. These examinations are usually made at the same time that state examinations are made, and on a coöperative basis with the state examiners, although Federal Reserve examiners may, at any time when circumstances are felt to warrant separate action, examine independently any particular bank.

The Board of Governors of the Federal Reserve System maintains a corps of auditors to examine the twelve Federal Reserve banks.

The Reconstruction Finance Corporation is another Government agency which has examiners to investigate banking situations in which it has a financial interest. They do not make complete examinations of the banks concerned but content themselves, ordinarily, with seeing if the various covenants made with the Corporation are being faithfully observed. They may also audit a particular phase of the bank's operations, such as loans, or the accounting for reserves and dividends. To be specific, most of their examining has been to determine the nature of the credit risk of institutions which desired Reconstruction Finance Corporation loans. In the past their chief function has been to make credit examinations *before*, rather than balance sheet audits *after*, the Corporation's participation in the capital structure of the bank.

State examining authorities. The organization of the bank examination function in the States varies considerably: from the smaller States, in which the superintendent of banking, in his spare time, personally examines the state banks, trust companies, savings banks, building and loan associations, and similar public financial institutions, to the elaborate machinery of the banking department of the State of New York.

While the banking department of New York is by no means typical of the other States, because of the size of its task, it will, however, be briefly discussed.

The concentration of banking resources in New York City and the enormous size of several of the State-chartered trust companies necessitate a large State banking department with hundreds of employees and a high degree of proficiency and efficiency in its examining work.

The superintendent of banking has under him deputy superintendents with the customary duties. Examiners in charge of districts have under them the examiners and clerks who do the actual work of examining the institutions in their charge. With the exception of the superintendent, the regular employees of the department are employed under Civil Service examination. This practice assures continuity of employment and a minimum of political interference. Temporary employees, engaged to aid the examiners as the volume of work demands, are, however, not subject to Civil Service requirements.

From every standpoint, the banking department of this State compares very favorably with that of the Comptroller of the Currency. The examiners are able, and the examinations thorough. It is betraying no secret to say that the department in recent years has been pitifully undermanned in relation to the examination duties imposed on it by law.

As explained earlier, the Federal Reserve banks examine state institutions which are members of the Federal Reserve System.

Other examining authorities (non-governmental). *Clearing houses* maintain an examination force to audit member banks at least once a year, or oftener if necessary. Because of the concentration of their efforts on the membership of the clearing house association, these examinations generally attain high standards. They are undoubtedly the most searching and intelligent of all the examinations imposed on the banks.

Even the country clearing houses have found it advisable to

maintain an examining staff, although the practice is not so general as in the city clearing houses, where it is practically universal.

The New York Clearing House, in 1939, substituted scrutiny and inspection of the official Federal and State examining authorities' reports for the complete examination formerly given all members. Under the bylaws, however, it retains the right to make a thorough examination and audit at any time. There seems to be a similar tendency on the part of the other clearing houses.

Public accountants are often engaged by the directors to audit the bank. Such examinations may be merely balance sheet audits, or they may be a much more searching type of earnings audit.

The *auditing department* within the bank is relied on by the management, particularly in larger institutions, to maintain close and continuous audit control over all transactions. While the smaller banks cannot afford to maintain a separate department—or even a single officer, in the smallest institutions—the auditing function, in a broad sense, must be carried out by someone if the bank is to be protected from losses resulting from errors and dishonesty.

Bank auditor. The bank auditor is far more than a clerical detective. Checking up on what has happened is but a small part of his work. Properly his duties concern themselves with foresight and not hindsight. It is the job of the auditor to devise a system of *protective control* which will function automatically in most respects and reduce “gum-shoe” work to a minimum. In fact, when the auditor “gets something on someone,” the chances are that, from a managerial standpoint, it will reflect more on his own control system than on the individual involved.

The successful bank auditor must be far more than a first-class accountant; he must know the banking business. He must be an expert on system and organization. He must have vision and, above all, force and character, for no one audits the auditor.

More specifically, the auditor's work requires a knowledge of accounting, statistics, graphic presentation, law, taxes, and insurance. This is not to say that he must be a past master in each of these specialties; the size of the bank and the scope of his duties determine the extent of the qualifications.

The auditor should be an independent official reporting directly to the president or the board of directors of the bank. Further, he should be forbidden to do any operating work of any kind. Disregard of either of these principles leads to unnecessary risks. For

example, the auditor will not feel free to criticize the functioning of the other officers if he has to report to one of their number. On the other hand, if the auditor is permitted to do operating work, it is possible for him to defraud the bank continuously and leave no record.

Indeed, no bank should permit such a dangerous combination of duties if it is at all possible to avoid the practice. If, in a smaller bank, it is necessary for one officer both to audit and to operate, special arrangements should be made for the president or some other executive, higher than this auditor-officer, to check his operating work at frequent intervals.

If the auditing work is too heavy for the auditor, a separate department should be set up. Because of the importance of segregating that function, this should be done even if there is in the department only one man besides the auditor. For the reasons mentioned above in connection with the auditor, the personnel of the auditing department must be independent and should never be allowed to do any operating work.

The auditor will frequently have to battle to preserve the integrity and autonomy of his department. If he hesitates in this respect, he will lose the confidence of his men, and his efforts will be doomed to failure.

Bank auditing. The aim of auditing, accounting, and control is to protect the bank and its employees from honest error and dishonest manipulation. The reader will note that the purpose is to safeguard human values as well as asset values. Ideally, this would mean a system of control which would protect the bank's values so closely that no employee would be even tempted to dishonesty, much less succumb to it. Practically there should be a compromise between the insufferable red tape and heavy expense of such a system and the lack of internal control which has characterized so many of the smaller banks.

Regardless of the detail involved, all auditing efforts fall into three categories: balance sheet audits, "spot" audits, and continuous audits. The *balance sheet audit* is an actual check and verification of the assets and liabilities, and is substantially the same whether made by the bank's auditors or government examiners. The "*spot*" *audit* is the application of the same technique to a localized operation or situation within the bank. The *continuous audit* is a plan of internal check and control, partly automatic and partly dependent on the auditor or his assistants.

Continuous audit. In a sense, the continuous audit is more a philosophy of management than an actual audit. It is a system of internal "checks and balances" based on the following safeguards: (1) definite operating procedures from which no deviation is allowed except with executive approval, (2) dual responsibility for the bank's assets and the performance of duties, (3) frequent breaks in continuity of employees' tasks. These points are important enough to warrant further discussion.

(1) Clearly defined, rigid operating procedures, with provision for calling every unusual transaction to the attention of designated officials for a determination of the procedure to be followed, comprise the most important safeguard that a bank can have. Bank officers as well as clerks must be required to observe scrupulously the established operating methods and procedures, if safety is desired. Clear-cut and sound internal procedures, rigidly enforced, are necessary if bank auditing is to be successful.

(2) Dual responsibility for the various banking activities is one of the first precepts of banking safety. Requiring more than one employee to approve each transaction obviously reduces errors and makes defalcations much more difficult. If it is possible to split up a transaction into several operations so that more than two employees will be involved, so much the better. This practice makes each clerk temporarily an auditor as far as the other clerks are concerned.

Psychologically, the basis of the success of this method of internal control is the diversity of interests of individuals. To carry out this principle to the fullest extent, banks ordinarily refuse to employ relatives; likewise, if two employees get married, one must resign from the bank. By capitalizing this diversity of interest among different individuals, banks go far in protecting their assets.

(3) Breaks in the continuity of the employee's occupancy of a particular position, the third safeguard, cost very little compared with the moral and restraining influences engendered. Rotation from one job to another, annual vacations, transfers among departments, and other devices break the continuity of performance of a particular job and cause any concealments to come to light.

Auditing income and expenses. A properly devised system of accrual accounting is the best way to audit *income*. The audit of income must be current if losses are to be avoided, as any item which fails to materialize in an income account is, as a practical

matter, lost. What is needed is an adequate system of accounting which will control all such items from the time they arise.

Auditing the *trading income*—such as trust fees, foreign exchange profits, exchange (domestic), service charges, miscellaneous profits, and so on—involves daily checks, by the auditor, of certain records and “spot” audits, from time to time, of operations.

Expenses are audited from the standpoint of authority, that is, to see that they are properly authorized and are made for legitimate purposes from which the bank will receive value. Most of this auditing is done before the transaction takes place. Voucher systems and other methods are used. If it is done afterwards, it is usually a perfunctory sort of performance.

Expenses are also audited from the standpoint of usefulness. This latter is, primarily, a problem for the bank's management. While the auditing department might make recommendations, it is really the responsibility of management to determine whether the expenditures are absolutely necessary for the successful operation of the bank.

Balance sheet audits. No matter how modern the accounting system or how perfect the continuous audit, the safeguards afforded by these must be supplemented at periodic intervals by old-fashioned balance sheet audits. From time to time, the assets and liabilities must be marshalled and required to justify themselves to the satisfaction of independent examiners who have no connection with the operation side of the bank. This inspection, authentication, and verification of the bank's resources and liabilities, although somewhat prosaic in method, is, all too often, dramatic in result. It is through these examinations that weaknesses, financial and human, are brought to light with their tragic consequences.

It is not the function of this chapter to present the details of a comprehensive bank audit. Such detail is unnecessary, as the balance sheet audit of a bank differs but little (even in detail) from a similar audit of any business institution. In this respect, the balance sheet audit differs from the continuous audit, which, it will be recalled, has to be a tailor-made proposition. The method of continuous audit differs even among similarly situated banks. The details of the examinations of the various examining authorities may differ—that is, the extent and character of the examinations may vary—but they are all based on simple, everyday auditing principles with which most readers are familiar.

A worth-while idea of the nature and comprehensive character of certain of these balance sheet audits may be secured by a brief survey of the forms used by the Federal Reserve bank examiners in the examination of member banks. It should be added that these forms are in constant process of revision, and hence the ones in this book should not be assumed to be the final work in such examinations.

As to size, the Federal Reserve bank examiners' report forms comprise (in 1940) thirty-three pages of legal size paper. Most of the pages list closely spaced questions printed in small type and, in addition, schedules, balance sheets, and other auditing data. An idea of the detail involved can most readily be secured by a consideration of one of these forms.

LOANS AND DISCOUNTS IN GENERAL

1. State briefly the procedure followed in connection with establishing lines of credit and making, authorizing and approving loans
2. Does board or discount committee review Demand loans periodically?
Important loans in advance of maturity?
3. How often does discount committee meet?
4. Are the provisions of Regulation U with respect to loans for the purpose of purchasing or carrying stocks registered on a national securities exchange being observed? If not, give particulars.
5. (a) If the bank has sold or placed with others any loans, mortgage bonds, participations, or other assets, give full information and comment on the extent of such practices, the amount repurchased, aggregate outstanding, and the bank's liability, if any.
(b) Does the bank take loans to accommodate other banks?
If so, list the banks accommodated and give amount and class of paper held, and state whether banks from which paper was accepted appear to be liable in any way
6. What is the usual rate of interest charged on loans?
Highest? Lowest?
7. Is adequate credit information in the bank's files?

PAST DUE LOANS

(Including real estate mortgage loans)

A. Statutory bad debts in loans, as defined by Section 5204, Revised Statutes	\$
B. Other past due loans	
Total past due loans	
(% of total loans of \$)	.. \$

COMMENTS

The typical question sheet *Loans and Discounts in General*, reproduced here, shows the nature of the examination questions and

also the interest of the examining authority in the system of credit control.

It should be clearly understood that the examiner, not the bank officials, answers the above questions.

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The above index of the report of the examination conveys a more accurate idea of the major points covered on the examination than a mere description of it can do.

The examiner must look up these things himself—everything must be verified. He is not permitted to take anyone's word for anything. He is required to corroborate all such information and in every way to satisfy himself by first-hand verification that his report presents a true picture of the bank's condition as of date.

Reports. In addition to examinations, banks must make voluminous reports to the supervisory authorities. Originally these

were confined to three or four "reports of condition" each year, but latterly they have been obliged to assemble data for economic reports of all kinds. Senatorial committees with their power of subpoena have demanded reports which have cost single large banks as much as \$50,000 to prepare. Daily reports must be made by certain departments to the various taxing agencies.

While these reports may be necessary, they impose a heavy financial burden on the banks. They also seriously interfere with the ordinary operations of banking. It is questionable whether the results warrant the effort expended by the banks. Had these extra reports been loaded on the banks simultaneously, the banks would undoubtedly have protested more effectively; but the reports were added gradually until the present intolerable burden was reached.

The Government utilizes bank records in practically all of its cases—kidnapping, racketeering, or what not. In fact, records have become so public that many hesitate to use bank facilities; in other words, the banker cannot plead a confidential relationship with his depositor as the lawyer can with his clients.

Honesty is the best protection. No system has ever been devised that someone could not beat. Most bankers know that their best protection is the honesty of their employees. Furthermore, bankers know that if the directors and officers play fast and loose with other people's money, the employees will not be far behind. A safe, sound bank must be honest at the top as well as at the bottom.

Examinations, audits, and reports will *aid* in keeping a bank sound and honest. They cannot, unfortunately, guarantee it against loss. As suggested above, there is no way to keep a man from stealing in a bank. (Stealing is a problem even in penitentiaries, where the opportunities are much more limited.) The task of auditing is to make defalcations difficult, detection prompt and certain, and responsibility for the loss definite. Although great progress has been made, auditing is still striving toward this goal of perfection.

Questions for Study and Review

- 1 Why are bank examinations a necessity in America?
- 2 Why have bank examinations not prevented failures in recent years?
- 3 In addition to examinations, what else is involved in banking regulation?
- 4 List the purposes of bank supervision.

5. Name five supervisory authorities.
6. Name five examining authorities.
7. Differentiate between examinations and supervision.
8. Outline the work of the auditing department.
9. Explain: (a) the continuous audit; (b) the "spot" audit; (c) the balance sheet audit.
10. What is the purpose of bank auditing? In what way does it differ from government examinations?
11. What are the best methods of auditing income and expenses?
12. What are the major points covered in a balance sheet audit during an official examination?
13. Discuss the reports rendered by banks to the various authorities

Problems

Complete solution to the problems below would require a knowledge of accounting and bank auditing procedure as well as access to the original records of the banks. Further information may be supplied by the instructor at his discretion.

1. Reconciliations between a small country bank and its city correspondents are made by the assistant cashier, who also signs the cashier's checks issued by the bank. The bank examiners find a debit difference of \$21,000, extending over a fourteen-month period, in the "Due-from-Banks" item.

- (a) How could they discover this?
- (b) What defect in the system of continuous audit made this defalcation possible?
- (c) Why wasn't it discovered sooner?

2. It is the custom of the auditor of Bank X to audit the cashier's check account monthly. Due to the illness of the auditor, a substitute auditor departs from the schedule and audits the account in three weeks and finds two of the cashier's checks unaccounted for in the bank's records.

- (a) How could he discover this?
- (b) What does this probably indicate?
- (c) What weakness does this demonstrate?

3. The directors feel that their earnings are smaller than they should be, considering the volume of loans and earnings of comparable banks. Accordingly, they instruct their examining committee to make a special examination of the income accounts of the bank, particularly those having to do with the note-teller's cage. Although a searching examination was made of the note-teller's work over a period of several years, nothing was discovered. Having heard, however, that the note-teller is living on a scale considerably beyond his salary, they engage an outside firm of certified public accountants to audit the bank and instruct them to pay special attention to the problem mentioned above. The accountants find that the note teller has abstracted an average of \$15 a day for the last twenty-three years in spite of the fact that his accounts have been examined regularly during the period.

- (a) Does this discovery indicate a defect in the examination system?
- (b) How could this petty stealing of the note-teller have been prevented?
- (c) What action should be taken with respect to the note-teller?

4. The audit committee of the Board of Directors discovered a shortage of \$110 when they ran up the savings accounts and compared the total with the figure carried on the general ledger. Looking for this difference, they discovered several savings ledger sheets which had been filed with the canceled sheets although the accounts had not been closed out. Upon questioning the cashier, they were told that the assistant cashier in charge of the savings department had had the responsibility for proving these accounts for some fifteen years. Further investigation disclosed a shortage of more than \$15,000.

- (a) Describe the technique of the "further investigation."
- (b) How did it happen that the audit committee discovered the defalcation on this examination but failed to do so on fourteen previous examinations?
- (c) How can temptation be removed from the *new* assistant cashier?

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CHAPTER 18

The Federal Reserve System

A central bank system. The Federal Reserve banks constitute the central banking system of the United States. In contrast, however, to the various European countries where only one central bank exists, the Federal Reserve System is decentralized in that there are twelve Reserve banks co-ordinated through the Board of Governors of the Federal Reserve System, formerly known as the Federal Reserve Board. The Federal Reserve System comprises the following: (1) the Board of Governors of the Federal Reserve System; (2) the 12 Federal Reserve banks, with 24 branches; and (3) the member banks, which number about 6,800.

The decentralization of the central banking system in the United States, however, is more legal in the form than in its operations, since the policies of the Federal Reserve banks are largely dominated and determined by the Board of Governors. This difference becomes particularly clear if one examines the more important functions of the Federal Reserve banks, which consist of fixing the discount rate, carrying on open market operations, and conducting transactions with foreign central banks. Although each Federal Reserve bank fixes its own discount rate every fourteen days or oftener, the changes are subject to review and determination by the Board of Governors.

Similarly, the open market operations of the entire Federal Reserve System—one of the most important types of instruments of credit control under normal conditions—are directed by a single committee, the so-called Federal Open Market Committee. All international relations of the Federal Reserve banks are under the strict supervision of the Board of Governors. The more drastic

powers to regulate the volume and flow of credit, particularly in connection with the security markets, are vested entirely in the Board of Governors. The decentralization of the Federal Reserve System is, therefore, more nominal than real.

The Board of Governors of the Federal Reserve System. The Board of Governors, which co-ordinates and supervises all the activities of the Federal Reserve banks, is located in Washington. The Board is composed of seven members appointed for a period of fourteen years, by the President of the United States, by and with the advice and consent of the Senate.¹ A member of the Board of Governors who has served a full term of fourteen years is not eligible for reappointment. In appointing members of the Board, the President is required, under law, to have regard to representation of the financial, agricultural, industrial, and commercial interests of the United States and to the geographical divisions of the country as well. No two members of the Board of Governors may be appointed from the same Federal Reserve district. The President of the United States appoints one of the seven members as chairman and one as vice-chairman (formerly, governor and vice-governor), and these officers serve as such for a period of four years. The chairman (or, in his absence, the vice-chairman) presides at the meetings of the Board of Governors.

The function of the Board of Governors may be described briefly as follows. In coöperation with the Federal Reserve banks, the Board formulates the credit policies of the Federal Reserve System. To carry out these policies, the Board has the powers enumerated below.

(1) To review and determine the discount rate of each Federal Reserve bank, and to require that changes in the discount rate be made oftener than once in fourteen days.

(2) To control open market operations. A provision of the Banking Act of 1935, which came into effect on March 1, 1936, created a Federal Open Market Committee composed of the seven members of the Board of Governors and five representatives of the Federal Reserve banks. An amendment of July 7, 1942, provided that the representatives shall be presidents or first vice-presidents of Federal Reserve banks and shall be elected annually as follows: one by the board of directors of the Federal Reserve bank of New

¹ Immediately prior to February 1, 1936, when this section of the Banking Act of 1935 went into effect, the Federal Reserve Board was composed of eight members, of whom two, the Secretary of the Treasury and the Comptroller of the Currency, were ex-officio members.

York; one by the boards of directors of the Federal Reserve banks of Boston, Philadelphia, and Richmond; one by the Federal Reserve banks of Cleveland and Chicago; one by the Reserve banks of Atlanta, Dallas, and St. Louis; and one by the Reserve banks of Minneapolis, Kansas City, and San Francisco. The Federal Open Market Committee must meet at least four times a year.

Under the Banking Act of 1935, beginning March 1, 1936, no Federal Reserve bank may engage in, or decline to engage in, open market operations except in accordance with the directions of the Committee. The open market operations must be carried out for the purpose of accommodating commerce and business, with due regard to their general bearing on the credit situation of the country.

(3) To change reserve requirements. Under the Banking Act of 1935 the Board of Governors may, by an affirmative vote of not less than four of its members, change the requirements as to the reserves which the member banks must maintain with the Reserve banks against their demand and time deposits. The law, however, stipulates that the reserve percentages required to be maintained shall never be below, nor more than double, those in force prior to the enactment of the Banking Act of 1935. For the purpose of changing reserve requirements, member banks may be classified as follows: those in Reserve and central Reserve cities, and those outside such cities. This provision of the law has greatly enhanced the Board's powers over the money market, since it is thus enabled to influence the excess reserve balances of the member banks without conducting open market operations.

(4) To approve the appointment of the president and first vice-president of each Federal Reserve bank. Under the Banking Act of 1935 the chief executive officers of each Federal Reserve bank are the president and vice-president. They are appointed by the board of directors of the bank, with the approval of the Board of Governors of the Federal Reserve System, for a term of five years.

(5) To determine the acceptability of ineligible paper. The Board of Governors prescribes rules and regulations under which Federal Reserve banks may make advances to member banks on collateral not eligible for discount.

(6) To make examinations of the Reserve banks, to require them to deliver reports and statements of their condition, and to supervise the issuance of Federal Reserve notes. In the exercise of these supervisory functions, the Board of Governors promulgates

rules and regulations in accordance with the authority granted to it by the Federal Reserve Act.

(7) To regulate security loans. The powers of the Board of Governors to control the use of bank credit for the purpose of speculating in securities were greatly increased by the Banking Act of 1933. Under this Act the Board of Governors is authorized, upon the affirmative vote of not less than six of its members, to fix for each Federal Reserve district the percentage of individual bank capital and surplus which may be represented by loans secured by stock or bond collateral by member banks within the district. The percentage so fixed may be changed from time to time upon ten days' notice. The Board of Governors is authorized to direct any member bank to refrain, under penalty of suspension of all rediscount privileges at the Federal Reserve banks, from further increasing its loans secured by stock or bond collateral for any period up to one year.

(8) To regulate margin requirements. The power of the Board of Governors over the money market, and particularly over secured loans, was further increased by the provisions of the Securities Exchange Act of 1934. Section 7 of this Act provides that, for the purpose of preventing the excessive use of credit for the purchase or carrying of securities, the Board of Governors shall prescribe rules and regulations with respect to the amount of credit that may be initially extended and subsequently maintained on any security, except an exempted security, registered on a national securities exchange. These rules and regulations apply not only to members of national securities exchanges and to brokers and dealers transacting a business in securities through the medium of such members, but also to all loans extended or arranged by other persons for the purpose of purchasing or carrying any security registered on a national securities exchange. However, the provisions regarding persons other than members of a national securities exchange, or brokers and dealers doing business through them, do not apply to the following transactions: (a) to a loan made by a person not in the ordinary course of his business; (b) to a loan made on an exempted security; (c) to a loan made to a dealer, to aid in financing the distribution of securities to customers, not through the medium of a national securities exchange; (d) to a loan made by a bank on a security other than an equity security; or (e) to such other loans as the Board of Governors shall exempt.

In addition, Section 8 of the Act requires that members of a national securities exchange, or any broker or dealer who transacts a business in securities through the medium of a member, may borrow on securities registered on a national securities exchange only (a) from a member bank of the Federal Reserve System, (b) from a non-member bank which has filed with the Board of Governors an agreement to comply with all provisions of legislation applicable to member banks regarding the use of credit to finance transactions in securities, or (c) in accordance with such rules and regulations as the Board of Governors may prescribe to permit loans between brokers or dealers or to meet emergency needs.

The powers which the Board of Governors has over the money market in general and over security loans in particular are far greater than those exercised by the central bank of any other democratic country.

In addition to the broad and vital powers enumerated above, the Board of Governors has supervisory and regulatory powers that may be summarized as follows:²

The Board of Governors passes on applications

for the admission of State banks and trust companies to membership in the Federal Reserve System and on withdrawals therefrom,

for permits to holding company affiliates to vote the stock of member banks; for permits covering certain relations between member banks and organizations dealing in securities;

for permits granted under authority of the provisions of the Clayton Anti-Trust Act relating to interlocking bank directorates;

for authority to national banks to exercise trust powers, to establish branches in foreign countries and dependencies or insular possessions of the United States, and to invest in the stock of banks or other corporations engaged in international or foreign banking.

The Board

receives condition reports and earnings reports from State member banks, and reports of their affiliates,

issues regulations limiting the rate of interest which may be paid by member banks on time and savings deposits.

The Board is empowered

to prescribe regulations relating to the formation and operation of corporations organized under Federal law to engage in international and foreign banking;

to examine member banks and the affiliates of State member banks.

²From a pamphlet published by the Federal Reserve Bank of New York.

The Federal Reserve banks. There are twelve Federal Reserve districts in the United States, and one Federal Reserve bank is located in each district. The twelve Federal Reserve banks have twenty-four branches. The agencies in Havana, Cuba, and in Savannah, Georgia, which had been operated by the Federal Reserve Bank of Atlanta, were discontinued as of October 1, 1938, and January 31, 1945, respectively, by the Board of Directors of the Atlanta Reserve bank, with the approval of the Board of Governors of the Federal Reserve System. Each Federal Reserve bank is known by the name of the city in which it is located. The shares of each Federal Reserve bank are owned by its member banks. Every national bank must be a member of the Federal Reserve bank of its district, whereas State banks may become member banks if they meet the requirements specified in the Federal Reserve Act. Each member bank must subscribe, to the extent of 6 per cent of its capital and surplus, to the shares of the Federal Reserve bank in the district where it is located. Up to the present time, however, only 3 per cent of the capital and surplus has been paid in, the remainder of the subscriptions being subject to call by the directors of the respective Reserve banks. All member banks must maintain deposits with their respective Reserve banks, as specified by the Federal Reserve Act and by regulations of the Board of Governors.

Each Federal Reserve bank has its own board of nine directors, divided into three classes known as Class A, Class B, and Class C. The member banks elect Class A and Class B directors. For the purpose of electing directors, the member banks in each Federal Reserve district are divided into three groups, each group consisting as nearly as possible of banks of the same size. Each group chooses one Class A and one Class B director. Class A directors represent the stockholding banks and, as a rule, are officers of member banks. Class B directors represent industry, commerce, or agriculture in the respective Federal Reserve districts. Class C directors are appointed by the Board of Governors, which also approves the appointment of the president and first vice-president of each Federal Reserve bank. The administrative functions of each Federal Reserve bank are under the chief executive, who is the president, and in his absence the first vice-president acts as chief executive.

Federal Reserve banks are not intended primarily to be profit-making institutions. After all necessary expenses have been paid,

the stockholders are entitled to receive a cumulative dividend of 6 per cent per annum. The rest of the profits, under the Banking Act of 1933, are credited to surplus. The resources at the disposal of the Federal Reserve banks are derived from the following sources:

1. Capital and surplus
2. Deposits of the member banks.
3. Deposits of non-member banks, usually classified as other deposits, which are maintained with the Federal Reserve banks for clearing purposes.
4. The deposit of the Federal Treasury.
5. Deposits of foreign central banks and governments.

Functions of Reserve banks. The principal functions of the Federal Reserve banks, briefly summarized, are as follows: (1) to hold as deposits all the reserves of the member banks, which function makes the Federal Reserve banks the ultimate source of bank credit for the banking system; (2) to issue currency; (3) to grant loans and advances to member banks; (4) to deal in Government securities and acceptances in the open market; (5) to clear and collect checks; and (6) to act as fiscal agent for the Treasury.

Issuance of currency. The Federal Reserve banks may issue only one type of currency: Federal Reserve notes. Federal Reserve notes must be backed by a reserve of at least 25 per cent in gold certificates. Federal Reserve notes must be secured 100 per cent by collateral consisting of gold certificates, eligible paper, or Government securities obtained as collateral for advances or acquired in the open market. Gold certificates deposited as collateral security may also be counted toward the reserve requirement. Federal Reserve notes are obligations of the United States and a first lien on the assets of the issuing Reserve bank.

Up to June 12, 1945, the Federal Reserve banks could also issue Federal Reserve *bank* notes, provision for which was made in the original Federal Reserve Act (1913), in order to replace the national bank notes in circulation. This plan, however, did not work out, since national bank notes were not retired in the expected amounts, and soon the Federal Reserve bank notes were withdrawn from circulation. They were issued again during World War I to replace silver certificates retired under the Pitman Act. The issue of Federal Reserve bank notes was revived during the banking crisis of 1933, when the Federal Reserve banks were authorized to issue Federal Reserve bank notes secured entirely by Government securities or eligible paper. With the reopening of the banks and the restoration of confidence, the volume of Federal Reserve bank

notes in circulation began to decrease and the notes were gradually withdrawn from circulation. The power of Reserve banks to issue Federal Reserve bank notes was repealed on June 12, 1945.

The Federal Reserve notes issued by the Federal Reserve banks have a high degree of elasticity in that they can be increased or decreased in accordance with the demands of business. Whenever a member bank needs additional currency, it can obtain a supply from its Federal Reserve bank, either by drawing on its surplus balances maintained at the Federal Reserve bank or by borrowing from the latter. Similarly, all notes not used for business purposes are returned by the public to the banks, and by the latter to the Federal Reserve banks.

Discounts and advances. The Federal Reserve System was established for the purpose, among other purposes, of creating an agency from which banks could obtain credit for seasonal or emergency needs. The Federal Reserve banks can make credit available through the following channels: (1) through discounting eligible paper; (2) through advances on the notes of member banks secured by obligations of the United States or by eligible paper; (3) through advances to non-member banks on eligible paper; (4) through advances to member banks on non-eligible paper; and (5) through industrial advances to banks or to individuals.

Discounts. The Federal Reserve banks may rediscount eligible paper for all member banks at the prevailing discount rate. The term *eligible paper* applies to credit instruments that are eligible for discount at the Federal Reserve banks under the terms provided in the Federal Reserve Act and under the rules and regulations prescribed by the Board of Governors of the Federal Reserve System. The general principles of eligibility are clearly defined in the Federal Reserve Act. A credit instrument, in order to be eligible, must arise out of a transaction related to an agricultural, industrial, or commercial purpose. The credit instrument must be created for, or the proceeds used for, the producing, purchasing, carrying, or marketing of goods. Any paper the proceeds of which are used to finance fixed investments of any kind is not eligible for rediscount. Similarly, any paper the proceeds of which are used for investment of a purely speculative character, or for carrying or trading in stocks and bonds, except obligations of the United States, or to finance relending operations, except relending by cooperative marketing associations and factors, is not eligible for discount with the Fed-

eral Reserve banks.³ Commercial paper must have a maturity of not more than 90 days at the time of discount. Agricultural paper arising out of activities of growers, in connection with the production, marketing, and carrying of agricultural products, including the breeding, raising, fattening, or marketing of livestock, may have a maturity of 9 months at the time of discount. Bankers' acceptances which arise out of the shipment of goods, including export and import, storage of readily marketable staples, and the creation of dollar exchange, are also eligible for discount at the Federal Reserve banks. In the classification of paper, the purpose of its original negotiation is the determining factor.

Advances. A member bank may obtain funds from its Federal Reserve bank by borrowing on its own notes secured by Government obligations or eligible paper. Such loans may not run for more than 90 days but are renewable.

Advances to non-member banks. The Board of Governors of the Federal Reserve System, by affirmative vote of five members, may authorize Federal Reserve banks to discount eligible paper for non-member banks, provided it is endorsed *or otherwise secured* to the satisfaction of the Federal Reserve banks. Prior to the Banking Act of 1935, non-member banks could borrow from the Federal Reserve banks only when the eligible paper was endorsed *and* secured to the satisfaction of a Federal Reserve bank.

Advances on non-eligible paper. According to the Banking Act of 1935 any Federal Reserve bank, under the rules and regulations prescribed by the Board of Governors of the Federal Reserve System, may make advances to any member bank on its time or demand notes which have maturities of not more than 4 months and are secured to the satisfaction of the Federal Reserve bank making the loan. Whenever such a loan is made, the rate of interest charged must be at least one-half of one per cent higher than the highest discount rate in effect at the lending Federal Reserve bank on the date the loan is made. The advances which the Federal Reserve banks may thus make to member banks on other than eligible paper correspond to the Lombard loans which are made by practically all continental European central banks and by the Bank of England.

³ Revised Regulation A provides that "a note of a finance company the proceeds of which are loaned to other borrowers for commercial purposes is eligible for discount by a Federal Reserve bank if the note complies with the applicable requirements of the regulation regarding maturity and other matters." (*Federal Reserve Bulletin*, February, 1938, page 86.)

Industrial advances. An act of Congress, approved June 19, 1934, authorized the Reserve banks to make loans on a sound and reasonable basis to, or purchase the obligations of, any established individual or commercial business. The law provides that such credit may be extended only: (a) in exceptional circumstances when it appears that the applicant is unable to obtain the requested financial assistance on a reasonable basis from the usual sources; (b) for working capital purposes; and (c) for a period of not more than five years. The Federal Reserve banks are also authorized to purchase from banks and other financial institutions obligations created in accordance with the above requirements, or to make loans secured by such obligations provided the seller or the borrower assumes liability for 20 per cent of any loss which may be sustained. A Reserve bank is also authorized to make commitments to a bank, whereby the former guarantees 80 per cent of the losses suffered on industrial advances made by the latter. The law limits the funds to be used for advances and commitments by the Federal Reserve banks to the total surplus of the Reserve banks as of July 1, 1934—about \$140,000,000, plus certain payments to be made by the United States Treasury, which brings the total available up to \$280,000,000. The law also provides for the establishment in each Federal Reserve district of an Industrial Advisory Committee to aid the Reserve banks in carrying out the provisions of the law. This committee represents commerce and industry, and each member must be actually engaged in some industrial pursuit within the district.

The Federal Reserve banks, in fixing rates of interest on industrial loans made directly to borrowers, have endeavored to avoid making these rates so low as to attract this business away from established banking and financial institutions. At some Reserve banks the rates vary in accordance with conditions of the loans.

Open market operations. The Federal Reserve Banks, as was stated before, can increase the volume of Reserve bank credit outstanding through open market operations. These consist of the buying of prime bankers' acceptances and of Government obligations or obligations guaranteed as to both principal and interest by the United States Government. Under the Banking Act of 1935 all open market operations of the Federal Reserve banks are under the direct supervision and control of the Open Market Committee discussed above. The Federal Reserve banks may buy prime

bankers' acceptances offered to them by member banks or dealers. These acceptances are bought at a rate fixed by the Reserve banks. They never sell acceptances except when these have been acquired under resale agreements. A decrease in the volume of acceptances held by the Federal Reserve banks during a given period indicates, therefore, that the volume of matured acceptances held by them was larger than the volume of new purchases. Whether a member bank will sell acceptances to the Federal Reserve bank or borrow from the latter will depend upon (a) the difference between the discount rate and the rate at which the Federal Reserve banks buy acceptances, and (b) the needs of the individual bank. Whenever the rate of interest at which the Reserve banks buy acceptances in the open market is lower than the discount rate, the banks will, rather, sell their acceptances instead of borrowing. If, however, a member bank should need the Federal funds for only a few days, it would be more profitable for the bank to borrow at the Reserve bank and not to sell acceptances. By far the largest volume of acceptances is held by the big banks located in the important money market centers, and these ordinarily borrow only for a few days.

In the buying of Government securities, the initiative rests entirely with the Federal Reserve banks as directed by the Open Market Committee. An increase in the volume of Government securities held by the Reserve banks is an indication that the latter are endeavoring either to offset an outflow of gold or to increase the volume of Reserve bank credit outstanding. The Government and/or Government-guaranteed securities purchased by the Federal Reserve banks are paid for by officers' checks of the Federal Reserve banks, which are credited to the reserve accounts of the member banks which present them. Hence, whenever the Federal Reserve banks buy Government securities in the open market, they increase the reserve balances of the member banks. In periods when the member banks are indebted to the Reserve banks, this practice results in a decrease in borrowings of the member banks from the Reserve banks. In periods when the borrowings of the member banks from the Reserve banks are very low, it causes an increase in the surplus reserve balances of the member banks with the Reserve banks. Since the purchase or sale of Government securities is entirely at the initiative of the Open Market Committee, it is a good indication of the credit policies pursued by the Reserve banks.

The Second War Powers Act of March 27, 1942, authorized the

purchase or sale by the Federal Reserve banks directly from or to the Treasury of direct or fully guaranteed obligations of the United States, provided that the aggregate amount of directly acquired securities held at any time by the twelve Federal Reserve banks does not exceed 5 billion dollars. This authority, scheduled to terminate December 31, 1944, was extended until March 31, 1947.

Clearing and collections. The Federal Reserve banks clear at par all checks drawn on members and depositors of the Reserve banks and deposited with them for collection. The process of clearing and collections and the operation of the Inter-district Settlement Fund are described in another chapter and need no further consideration here.

Fiscal agents for the Government. The Federal Reserve banks act as fiscal agents for the United States Government. This fact has an important influence on the money market—an influence that is particularly felt on days when income tax payments are due. On the 15th of the months of March, June, September, and December each year, the Treasury has the task of collecting income taxes, of calling in funds from depositary banks all over the country for payment of interest on government obligations, of selling new Treasury notes, bills, certificates of indebtedness, and often long-term bonds, and of redeeming or refunding matured issues. In spite of the magnitude of the transactions, the technique of Treasury financing has been so highly developed that ordinarily they cause little or no disturbance in the money market, and it is seldom that interest rates are even temporarily affected.

The technical details of this financing, and the amounts involved, vary considerably from one quarterly date to another. They are governed by a number of factors, including the amount of the Treasury's cash balances, the financial needs of the Government for the next quarter, the amount of revenue expected to be collected, the condition of the Government securities market, the amount of maturing obligations to be redeemed or refunded, and the reserve position of the member banks.

The quarterly financial operations of the Treasury begin with the disbursement on the 15th of funds for payment of interest on the public debt, for redemption of short-term Treasury securities, and for special purposes—such as, for example, loans to veterans, as on March 15, 1931. Payment is made by checks drawn on the Reserve banks which are immediately deposited by the recipients

with commercial banks and sent by the latter to the Reserve banks for credit to their accounts; an increase in member bank reserve balances thus results. At the same time that these disbursements are being made, the Treasury is also receiving checks drawn on commercial banks in payment of taxes and for new issues of Treasury obligations. As these checks are collected, member banks' balances at the Reserve banks are debited, so that the effect is just the opposite of that of disbursements.

If disbursements and collections exactly coincided, they would offset each other, and there would be little change in the total of member bank reserve balances. However, in practice, collections lag several days behind disbursements, and in order to cover the temporary deficit, the Treasury resorts to borrowing from the Reserve banks. This borrowing takes the form of a purchase by the Reserve banks of a "special" one-day certificate of indebtedness for amounts up to several hundred millions of dollars. The certificate is renewed each day in decreasing amounts as collections come in.

The amount borrowed in this manner is, of course, credited to the Treasury's account at the Reserve banks and is drawn on to cover the Treasury's disbursements. Consequently, it results in an expansion of Federal Reserve bank credit outstanding, and causes an increase in member bank reserve balances which, under normal conditions, would create a temporary condition of artificial ease in the market.

Several measures are used to prevent the latter condition. In the first place, the Reserve banks may sell participations in the special Treasury certificate of indebtedness to the member banks (mainly in New York), and the reserve balances of the latter are debited by the amount of their participation. A second method whereby the Reserve banks, under normal conditions, may counteract the effect of Treasury borrowing is the sale of Government securities in the open market together with a reduction in holdings of acceptances by a failure to replace maturities. However, this method is not always feasible. During 1934 and 1935, for example, it would have been inconsistent with the Government's financial policies for the Reserve banks to affect adversely the quotations for Government securities by selling even a small part of their holdings. At the same time their portfolio of acceptances was so small that failure to replace matured bills would have had no

effect on the member banks' reserve balances. Finally (the third method), some of the slack is taken up by permitting the reserves of member banks in New York City to fall temporarily below requirements, so that, just prior to the Treasury operations, a deficit accumulates which is corrected by the excess reserves during the next few days. However, during periods when the member banks have large amounts of surplus balances with the Reserve banks, the last-mentioned measure is of no significance.

Although the greater part of the Treasury's operations are concentrated about the quarterly tax-collection and interest-payment dates, the Treasury is constantly carrying on financial dealings with the banking system which often have a pronounced effect on the credit conditions of the country. The Treasury is, of course, constantly collecting revenues from various sources and making disbursements to cover governmental expenditures. It is the established practice of the Treasury to keep most of its cash balances on deposit with the commercial banks throughout the country, but its checks are drawn on its deposits at the Reserve banks. Funds in the commercial bank depositaries are transferred to the Reserve banks at such times as they are needed.

Thus, the Treasury's current operations set up a two-way movement of funds between the Reserve banks and the commercial banking system. On the one hand, the Treasury withdraws funds from the Reserve banks by checks which are deposited by the recipients with the member banks and eventually credited to their accounts at the Reserve banks. On the other hand, it transfers funds from bank depositaries to the Reserve banks, which action results in debits to member bank accounts. Consequently, unless the amounts of debits and credits are the same, member bank reserve balances are affected.

Federal Reserve wartime credit policy. The Federal Reserve credit policy since the commencement of hostilities in World War II has been directed to (a) stabilize the Government security market, (b) maintain low interest rates, (c) facilitate the transition from peacetime to wartime economy and back again, and (d) combat inflation.

On September 1, 1939, the Board of Governors announced that the Reserve banks would make advances on equal terms to member and nonmember banks on Government obligations at par. This announcement was reiterated in the statement issued by the Board

on December 8, 1941, which also contained the following declaration of policy:

The System is prepared to use its powers to assure that an ample supply of funds is available at all times for financing the war effort and to exert its influence toward maintaining conditions in the United States Government security market that are satisfactory from the standpoint of the Government's requirements.

Effective March 20, 1942, the Board amended Regulation A authorizing the Reserve banks to make advances to member and nonmember banks on their promissory notes secured by direct obligations of the United States for periods not exceeding 90 days instead of the previous limit of 15 days only. Since the Federal Reserve Act (last paragraph of section 13) authorizes the Reserve banks to make advances for periods not exceeding 90 days to "any individual, partnership, or corporation" on promissory notes secured by United States Government obligations, the amendment to the Regulation represents merely a ruling of the Board that the term "corporation" includes any incorporated bank.

On April 30, 1942, the Federal Open Market Committee directed the twelve Federal Reserve banks to purchase all Treasury bills that might be offered to them on a $\frac{3}{8}$ per cent per annum discount basis. This fixed buying rate prevented the bill rate from rising above that level.

On February 21, 1942, the Board of Governors amended Regulation D in order to provide for the computation of reserve deficiencies by member banks in central reserve and all reserve cities on a weekly basis instead of the semiweekly basis which had been required, prior to this amendment, of banks in cities where Federal Reserve banks or branches thereof were located and in a few other reserve cities.

On July 7, 1942, the Federal Reserve Act was amended in order to empower the Board of Governors to change the reserve requirements of member banks in central reserve cities within the limits of the existing law without necessarily at the same time changing those of member banks in reserve cities. This authority was needed according to the Chairman of the Board, because "prospective heavy withdrawals for tax payments and for financing the war deprived the largest banks of the degree of flexibility that the current war situation demanded." On August 18, 1942, the Board

reduced the reserve requirements on demand deposits in the two central reserve cities, effective August 20, 1942, from 26 per cent to 24 per cent; on September 14, 1942, to 22 per cent; and again on October 3, 1942, to 20 per cent.

The above amendment also repealed the provision prohibiting member banks from making new loans or paying dividends while their reserves are deficient. However, the power of the Board to prescribe penalties for deficiencies in reserves was retained.

Regulation W. An Executive Order, issued by the President on August 9, 1941, authorized and directed the Board of Governors to regulate consumer credit during the national emergency. Under this authority the Board adopted and issued August 21, 1941, Regulation W, which has been amended from time to time and was revised May 6, 1942. The Regulation covers a comprehensive list of durable and semidurable goods for civilian consumption and embraces all types of consumer credit including installment sales, installment loans, charge accounts, and single-payment loans of \$1,500 or less. It applies to individuals, partnerships, associations, and corporations engaged in the business of making extensions of installment credit, or discounting or purchasing obligations arising out of such extensions of credit. It stipulates the amount of down payment, the maximum maturity, and the amounts and intervals of the installments for various groups of articles.

The aim of this "qualitative" credit-control measure was stated in the Executive Order under the heading "Declaration of Necessity and Purpose," which reads in part:

. . . the public interest requires control of the use of installment credit for financing and refinancing purchases of consumers' durable goods the production of which absorbs resources needed for national defense, in order (a) to facilitate the transfer of productive resources to defense industries, (b) to assist in curbing unwarranted price advances and profiteering which tend to result when the supply of such goods is curtailed without corresponding curtailment of demand, (c) to assist in restraining general inflationary tendencies, to support or supplement taxation imposed to restrain such tendencies, and to promote the accumulation of savings available for financing the defense program, (d) to aid in creating a backlog of demand for consumers' durable goods, and (e) to restrain the development of a consumer debt structure that would repress effective demand for goods and services in the post-defense period.

Regulation V. On March 26, 1942, the President issued an Executive Order authorizing the War and Navy Departments and the Maritime Commissions to (a) guarantee loans, discounts, advances, or commitments made by the Federal Reserve banks, the

Reconstruction Finance Corporation, or other financing institutions, and (b) to make or to participate with any Federal Reserve bank, the Reconstruction Finance Corporation, or other financing institutions in making loans, discounts, advances, or commitments for the purpose of financing contractors, subcontractors, and others engaged in businesses or operations deemed by the armed forces and Maritime Commission to be necessary for the prosecution of the war. The Federal Reserve banks were authorized to act as fiscal agents of the three procurement agencies in carrying out the provisions of the Order.

The objectives of this Order were summarized in a press statement by the White House which reads in part:

The Executive Order . . . is aimed at curing a situation which has interfered with the all-out participation of many small business enterprises in war production. . . . The basic purpose of the Order is to put working capital financing on a war basis. . . . Peacetime restrictions on credits cannot hold up production of war supplies needed by the armed forces.

Under the authority granted by this Order, the Board of Governors adopted, effective April 6, 1942, Regulation V, entitled "War Financing." The Regulation provides that:

Each Federal Reserve bank should arrange such financing, where practicable, without any guarantee or loan or participation therein by the War Department, the Navy Department or the Maritime Commission, through commercial banks whether or not members of the Federal Reserve System or other financing institutions, or through the Federal Reserve bank under the provisions of section 13b of the Federal Reserve Act. Where this is not feasible, guarantees by the War Department, Navy Department or Maritime Commission of loans made by such banks or financing institutions to the extent necessary should be used in preference to loans or participations therein by any of these agencies.

The maturity of production loans made or guaranteed in whole or in part by a Federal Reserve bank on behalf of any of the three agencies "shall be consistent with the needs of the borrower for the fulfillment of the contracts or orders," while the maturity of loans for "financing of facilities" must in no case be in excess of five years.

In the press release of April 10, 1942, accompanying the Regulation, the Board stated:

It is expected that any applicant will first take up his credit needs with his commercial bank or other financing institution. When the necessary credit cannot be arranged by the financing institution without the assistance of the War Department, the financing institution will apply to the Federal Reserve bank for a guarantee of a part or all of the proposed financing. After certification by

the liaison officer, it will be the Reserve bank's function to analyze the financial aspects of the application, including the integrity of the management, and determine the type of financing best suited to meet the situation

Control of credit by Federal Reserve banks. In earlier years the Board of Governors of the Federal Reserve System and the individual Federal Reserve banks relied principally on two instruments of credit control—namely, the discount rate and open market operations. By raising or lowering the discount rate, Reserve banks made it more or less expensive for member banks to increase their reserve balances through rediscounting or borrowing. Similarly, through buying or selling Government securities in the open market and through buying acceptances or allowing them to run off, the Reserve banks increased or decreased the volume of member bank reserve balances. As a rule these two instruments of credit control were used together. For example, if the Federal Reserve authorities wish to check the expansion of member bank credit, they might sell Government securities or reduce their portfolio of acceptances by not renewing matured bills. Payment for securities sold or bills matured is made by checks on the commercial banks, which action results in the debiting of the accounts of the member banks at the Reserve banks, and thus in a reduction of reserve balances. If, as a result of these transactions, the member banks are forced to borrow from the Reserve banks, then the latter by increasing the discount rate make borrowing more expensive.

In addition to these two instruments of control, the Federal Reserve System has at present two more measures at its disposal through which it can exercise an influence on the money market—namely, the control over loans made by banks for the purpose of carrying securities on margin (this control has already been discussed), and second, the power of the Board of Governors to vary reserve requirements. By raising the reserve requirements, the Board can automatically either reduce surplus balances which the member banks may have with the Reserve banks, or actually force the member banks to increase their borrowings at the Reserve banks; a subsequent reduction in reserve requirements will have an opposite effect.

From the above discussion it is clear that the crux of credit control exercised by the Federal Reserve System is directed toward increasing or decreasing the member bank balances with the Reserve banks. It is, therefore, necessary to analyze the factors which can bring about an increase or decrease in the reserve

balances. These factors are published regularly by the Board of Governors of the Federal Reserve System in a table headed "Factors of Increase and Decrease in Volume of Federal Reserve Bank Credit Outstanding." The table for August 8, 1945, as released by the Board, is reproduced below.

FACTORS OF INCREASE AND DECREASE IN VOLUME OF
FEDERAL RESERVE BANK CREDIT OUTSTANDING

(In millions of dollars)

	<i>Aug. 8, 1945</i>	<i>Aug. 1, 1945</i>	<i>Aug. 9, 1944</i>
U. S. Govt securities (incl Guar. Sec.)	21,910	+ 33	+6,688
Loans, discounts, and adv.	356	- 47	+ 284
Other Reserve Bank credit.	339	+ 55	+ 30
Total Reserve Bank credit	22,606	+ 42	+7,002
Gold Stock	20,151	- 1	- 845
Treasury currency	4,197	- 1	+ 89
Member bank reserve bal	14,833	- 28	+2,023
Money in circulation	27,269	+139	+4,359
Treasury cash	2,269	+ 9	- 71
Treasury deposits with F. R. banks	538	-140	+ 51
Non-member deposits and other F. R. accounts	2,045	+ 59	- 116

Analysis of table: bills discounted.⁴ This figure represents the total borrowings of the banks from the Reserve banks. Member banks borrow only to replenish their reserve balances. An increase in borrowing may be caused by one or several factors, such as (1) an increase in deposits of member banks, (2) the sale of securities or the reduction in the volume of acceptances held by the Reserve banks, (3) the export or the earmarking of gold, (4) an increase in the volume of currency in circulation, (5) an increase in the deposits of non-member banks with the Reserve banks. The operations of the Treasury also may influence the deposits of the member banks with Reserve banks and thus exercise an influence on their borrowing.

Bills bought and U.S. Government securities. These two items express the open market operations of the Reserve banks. An increase in the holding of acceptances or of Government securities places Federal funds at the disposal of the member banks; a decrease, on the other hand, reduces the volume of Federal Reserve credit. The movement of these two items as a rule indicates the open market policies pursued by the Reserve System. An increase in open market purchases usually indicates a desire on the part of the Reserve banks to create easy money market conditions. The sharp increase in the holdings of government securities by the

⁴Owing to the wartime decline in their relative importance, the items "bills discounted," "bills bought," and "industrial advances" are not shown separately.

Reserve banks was intended to counteract the huge increase in the volume of currency in circulation.

Industrial advances. This item consists of loans to private business enterprises made by the Reserve banks under authority of the Act of June 19, 1934. As far as the money market is concerned, such loans do not differ from bills discounted.

Other Reserve bank credit. This represents several items, including the so-called "float" arising out of the Reserve banks' system of collecting checks and drafts for commercial banks. "Float" is the difference between "uncollected items" and "deferred availability items"; or, in other words, it is an amount for which the Reserve banks have given the commercial banks credit, but which the former have not yet collected.⁵ It also includes the Reserve banks' holdings of Federal intermediate credit bank debentures, Federal land bank bonds, municipal warrants, and sums due from foreign central banks.

Total Reserve bank credit. This item is the combined total of the above five items and shows the total amount of Federal Reserve bank credit outstanding.

Monetary stock of gold. This item includes at present only gold held by the Treasury. Prior to January 30, 1934, monetary gold stock included (a) gold held by the Treasury, (b) gold held by the Federal Reserve banks, not including gold held under earmark for foreign account, and (c) gold coin in circulation in the United States. On January 30, 1934, all gold held by the Federal Reserve banks was transferred to the Treasury, so that today the Federal Reserve banks hold only gold certificates or gold certificate credits on the books of the Treasury against which the Treasury holds the gold. Since all gold coin was withdrawn from circulation, all imports and exports and changes in earmarks of gold are immediately reflected in the Treasury holdings.

⁵In describing the relation between the "float" and Reserve bank credit the Federal Reserve Bulletin of July, 1935, states. "Federal Reserve bank float generally has a positive or debit balance, because in making inter-district check collections the reserve balance of the depositing bank is credited according to a time schedule while the bank on which collection is being made at times is not charged until the following day. Exchanges for clearing house when received in the morning mail should, according to the time schedule, be collected the same day but often are not sorted until too late to be included in the clearings for that day and it is this which usually gives rise to the debit balance. A negative or credit balance is shown by Federal Reserve float when collected prior to being credited to the account of another member bank. This situation happens chiefly in connection with the interdistrict collection of noncash items, such as notes, but also whenever the actual collection of checks is made prior to expected collection according to the time schedule, which may occur when there is a bank holiday in some districts but not in others."

Treasury and national bank currency. This item represents the amount of credit which the Treasury has contributed to the financial system through putting into circulation currency for which it is directly responsible. An increase in this item means that the Treasury has put out more money, which in turn results in an increase in member bank balances with Reserve banks. The currency for which the Treasury is responsible and which entered into this item consists of the standard silver dollar, silver bullion against the pledge of which silver certificates and Treasury notes of 1890 are outstanding, subsidiary silver and minor coin, United States notes, Federal Reserve bank notes,⁶ and national bank notes. In 1935 all bonds bearing the circulation privilege were called. National bank notes, therefore, are gradually disappearing from circulation.⁷

Money in circulation. This item represents the total amount of currency of all kinds actually in circulation. The figures include, therefore, not only money held by the public, but vault cash held by banks and such United States money as may have been carried abroad, other than gold coin known to have been exported. Any increase in the volume of currency in circulation tends to decrease the volume of the member bank reserve balances, because the currency is obtained by member banks from the Reserve banks, and, in order to pay for the notes, the former draw on their reserve balances. Conversely, a decrease in the volume of currency in circulation results in an increase in member bank balances as the member banks return the unneeded currency to the Reserve banks and their accounts are credited with the amounts.

⁶Those Federal Reserve bank notes which were not covered by lawful money deposited with the Treasury and were, therefore, liabilities of the Federal Reserve banks, are not included in Treasury currency. Federal Reserve bank notes of this sort were outstanding prior to June, 1924, and again from March, 1933, to March, 1935. When issuance of Federal Reserve bank notes was discontinued, liability for the retirement of outstanding notes was transferred to the Treasury. During the period when this was taking place, the item of Treasury currency included such Federal Reserve bank notes as were covered by deposits for their retirement made by the Reserve banks with the Treasury. For example, on December 31, 1934, the situation as regards Federal Reserve bank notes was as follows:

Amount outstanding (from circulation statement)	\$118,762,000
Amount issued to Federal Reserve banks (from Federal Reserve bank statement)	37,590,000
Amount covered by deposits for retirement (including in Treasury and national bank currency)	81,172,000

⁷The power of the Federal Reserve banks to issue Federal Reserve bank notes was repealed on June 12, 1945. These notes will, therefore, rapidly disappear from circulation.

Treasury cash and deposits in Federal Reserve banks. This item represents cash funds available for expenditure by the Treasury, other than deposits with commercial banks. It includes gold in the exchange stabilization fund, gold in the general fund, currency and coins held in the Treasury, and the Government's deposits with the Reserve banks. A decrease in this item means that the Treasury has transferred some of its cash or Reserve bank deposits to the banking system, with a resulting increase in member bank reserve balances. An increase means that cash has been paid into the Treasury or that the Treasury has transferred some of its deposits with the commercial banks to the Reserve banks, thus reducing member bank reserve balances. The item "Treasury Cash" was increased by \$2,800,000,000 after the close of business on January 31, 1934, as a result of the reduction of the gold content of the dollar.

Non-member bank deposits and other Federal Reserve accounts. This consists of a number of items, of which non-member bank deposits are the most important. Non-member banks maintain deposits with the Reserve banks for clearing purposes. A reduction in these balances results in an increase in the reserve balances of the member banks, because the funds lost by the non-member banks are transferred to the member banks.

After this brief explanation it is possible to analyze the statement and to ascertain what factors were responsible for the decrease in member bank reserve balances by \$28,000,000 in the week ended August 8, 1945.

FACTORS WHICH INCREASED THE RESERVE BALANCES OF THE MEMBER BANKS

1. Increase in United States Government securities	\$ 33,000,000
2. Increase in other Reserve Bank credit	55,000,000
3. Decrease in Treasury deposits with Federal Reserve Banks	140,000,000
Total Increase	\$228,000,000

FACTORS WHICH DECREASED THE RESERVE BALANCES OF THE MEMBER BANKS

1. Decrease in loans, discounts, and advances	\$ 47,000,000
2. Decrease in gold stock	1,000,000
3. Decrease in Treasury currency	1,000,000
4. Increase in money in circulation	139,000,000
5. Increase in Treasury cash	9,000,000
6. Increase in nonmember deposits and other Federal Reserve accounts	59,000,000
Total Decrease	\$256,000,000
Total net decrease in member bank reserve balances	\$ 28,000,000

Questions for Study and Review

- 1 Explain why the Federal Reserve System may properly be regarded as a central bank system
- 2 List the principal powers of the Board of Governors of the Federal Reserve System.
- 3 Describe the present organization of the Federal Reserve System from the following viewpoints.
 - (a) Location of Federal Reserve banks and their branches;
 - (b) Membership in and ownership of a Federal Reserve bank;
 - (c) Control of each Federal Reserve bank, including method of electing or appointing directors and officers; and
 - (d) What becomes of the net earnings of each Federal Reserve bank.
- 4 List the principal sources from which the Federal Reserve banks obtain the funds with which to carry on their operations.
- 5 What are the chief functions of the Federal Reserve banks?
- 6 Outline the legal restrictions upon the issuance of (a) Federal Reserve notes and (b) Federal Reserve bank notes
- 7 Name and explain five ways in which the Federal Reserve banks may make their funds available to member banks and to the public.
8. Explain how open market operations may be used (a) to increase and (b) decrease the supply of credit available to business
9. Outline the principal services which the Federal Reserve banks perform as fiscal agents of the Government.
10. Name and explain the various ways in which the Federal Reserve banks may exercise control over credit.
11. List and explain the principal items that appear in a Federal Reserve bank balance sheet
- 12 Name the principal factors which (a) increase or (b) decrease the reserve balances of member banks, and explain why each factor affects the reserve balances as it does.
13. Describe the principal measures taken by the Reserve authorities to facilitate financing the war effort.

Problems

Assets and Liabilities of Twelve Federal Reserve Banks Combined:

ASSETS	
Gold certificates	\$17,311,110,000
Redemption fund for Federal Reserve notes	667,802,000
Total gold certificate reserves	\$17,978,912,000
Other cash	212,508,000
Discounts and advances	353,164,000
Industrial loans	3,154,000
Acceptances purchased	163,000
U. S. Government securities	
Bills	12,978,572,000
Certificates	6,120,511,000

THE FEDERAL RESERVE SYSTEM

ASSETS (Continued)	
Notes	1,697,950,000
Bonds	1,112,642,000
Total U S Government securities	\$21,909,675,000
Total loans and securities	\$22,266,156,000
Due from foreign banks	110,000
Federal Reserve notes of other banks	91,299,000
Uncollected items	1,682,707,000
Bank premises	33,965,000
Other assets	60,604,000
Total assets	\$42,326,256,000
LIABILITIES	
Federal Reserve notes	\$23,473,107,000
Deposits.	
Member bank—reserve account	14,832,650,000
U S Treasurer—general account	537,715,000
Foreign	1,148,287,000
Other	439,282,000
Total deposits	\$16,957,934,000
Deferred availability items	1,343,349,000
Other liabilities, including accrued dividends	9,112,000
Total liabilities	\$41,783,502,000
CAPITAL ACCOUNTS	
Capital paid in	\$ 171,452,000
Surplus (Section 7)	228,153,000
Surplus (Section 13b)	27,165,000
Other capital accounts	115,984,000
Total liabilities and capital accounts	\$42,326,256,000

1. The Federal Reserve Act as amended requires that the Federal Reserve banks maintain reserves in gold certificates of not less than 25 per cent against their deposits and Federal Reserve notes in actual circulation. Calculate, on the basis of the above statement, the amount of free gold certificates, i.e., the amount in excess of minimum legal requirements.

2. Effective August 15, 1936, the reserve requirements of the member banks were increased 50 per cent. A gold certificate for \$1,000 in the hands of the Federal Reserve banks could support (a) X dollars of demand deposits with Reserve city member banks prior to August 15, 1936; (b) Y dollars after August 15, 1936. What are the amounts of X and Y?

3. On the basis of the above Federal Reserve bank statement, calculate (a) to what amount the member bank reserve account could be reduced by open market operations; (b) what percentage of total assets is invested in U. S. Government securities.

4. A trust company located in Albany, New York, with a capital of \$1,000,000, a surplus of \$500,000, demand deposits of \$8,000,000, time deposits of \$3,500,000, has applied in September, 1936, for membership in the Federal Reserve System. (a) To what amount of stock of the Federal Reserve Bank of New York would the applying trust company be required to subscribe? (b) What is the amount of reserves to be maintained with the Federal Reserve bank?

5 The Federal Reserve banks, similar to other central banks, do not operate primarily for profit. From the above-mentioned statement of the Federal Reserve banks (a) list the "earning assets", (b) calculate the ratio of earning assets to total assets; (c) state what expenditures the Federal Reserve banks must meet besides the administrative expenses; (d) explain how the net earnings are disposed of.

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CHAPTER 19

The Money Market

Nature of the market. A *money market* is a mechanism for the investment of short-term funds and the medium through which a large part of the financial transactions of a particular country are cleared. Broadly conceived, the term includes the entire mechanism employed in financing business of all types. In the narrower sense in which the term is generally used, however, a money market includes only dealings in more or less standardized types of loans, for example, call loans and credit instruments (such as acceptances and Treasury bills), in which personal relations between lender and borrower are of negligible importance.

In a certain sense, a money market is a reservoir of short-term funds; it is a center where funds seeking temporary investment are accumulated and made available to those of the business and financial community desiring short-term accommodation. During normal times a money market of international scope attracts funds from all over the world and redistributes them among borrowers in many countries. Since these funds are short-term in character, they require liquid investments, which are provided by the acceptance market, the commercial paper market, the short-term Treasury bill market, and the call money market.

The first two markets—namely, the acceptance and the commercial paper markets—utilize these funds for the purpose of financing domestic and foreign trade. The short-term Government security market employs the funds to finance the deficits of the Government; while the call money market is used to facilitate marginal trading in securities already outstanding in the market, or to facilitate the issue of new securities before they have reached the ulti-

mate investor. Each of these divisions of the market is closely related to the others, and conditions in one often affect the others.

The New York money market is composed of the following individual markets:

1. Commercial paper market;
2. Acceptance market;
3. Collateral loan market, particularly the brokers' loan market;
4. Market for short-term Government securities,
5. Federal funds market (only in New York)

Individual markets. The New York money market is not a single homogeneous market; it is a combination of several separate markets, each dealing in a different type of short-term credit but all closely related. Some of the individual markets, such as the collateral loan and the commercial paper markets, date back a number of decades and have developed more or less spontaneously in response to the financial needs of the United States. Others, such as the acceptance and Federal funds markets, are the outgrowth of the Federal Reserve Act.

The individual markets are still in a state of flux. Thus, while the commercial paper market has decreased in importance, the acceptance market, in spite of the setbacks that it has suffered during the last few years, has shown considerable strength and will no doubt witness a rapid expansion in the post-war period. The collateral loan market, on the other hand, will probably play a much less important rôle in the future than it has in the past, since the regulations embodied in the Banking Act of 1933 and the Securities Exchange Act of 1934 are expected to prevent any such expansion of this type of credit as occurred in 1928 and 1929.

The short-term Government security market has expanded to tremendous proportions in the last few years, particularly during the war, and now overshadows all the other markets. However, the Federal Government's policy of financing a part of its needs through short-term Treasury bills and certificates of indebtedness must be regarded as of a temporary character, and it is expected that, as soon as the budget of the government is balanced, a portion of the short-term obligations will be converted into longer maturities.

The basic function of the money market is to bring together those who have short-term funds available for investment and those who have need of such funds. So long as the money market is able to perform this function, it makes no difference, as far as the

general market is concerned, in which of the individual markets the funds are employed, although the economic effects of the employment of short-term funds in the various markets differ. An understanding of the nature and operations of the various individual markets, however, is essential to the interpretation of current money market developments. The following is a brief analysis of the various short-term markets which at present constitute the New York money market.

Acceptance market. The market for bankers' acceptances in the United States is of comparatively recent development. Prior to the passage of the Federal Reserve Act in 1913, national banks were not permitted to accept drafts, and only a comparatively small amount of acceptance credit was created by a few of the state banks, by the larger investment banking houses, and by private bankers. The framers of the Federal Reserve Act, however, appreciated the advantages of bankers' bills as a means of financing trade, and realized that a broad acceptance market would contribute to the strength and flexibility of the banking system. This Act, therefore, authorized member banks to create acceptances subject to certain restrictions and to the rules and regulations of the Federal Reserve Board. It also made acceptances eligible for discount at the Federal Reserve banks, subject to the eligibility requirements, and authorized the Reserve banks to buy and sell eligible acceptances in the open market.

Classification of acceptances. The *banker's acceptance*, or banker's bill, is primarily an instrument for financing the movement or storage of merchandise. The Federal Reserve Act originally permitted member banks to create acceptances only to finance imports and exports, but was later amended to include other types of transactions. For many years, acceptances drawn to finance imports and exports have constituted the bulk of the bills outstanding in the United States. Bills of this character have long been regarded as inherently sound, because the transactions which they finance are self-liquidating in character. The same is true of bills drawn to finance domestic shipments, insofar as such instruments represent actual sales of goods.

The use of bankers' acceptances to finance goods stored in, or shipped between, foreign countries increased rapidly during the latter part of the 1920's. At the end of 1930 the amount of this type of acceptance credit outstanding was \$561,442,000, as compared with \$40,313,000 at the end of 1926. It was to be expected

that an important international money market, such as New York, would be called upon to finance foreign trade as well as some internal transactions of foreign countries, but it was inevitable that, unless the strictest standards were maintained, unsound practices would develop, with disastrous results to both drawer and acceptor. The "freezing" of a substantial amount of such acceptance credits under the German standstill agreements clearly revealed the dangers inherent in this type of financing.

Another type of acceptance credit which has come to be of some importance is that based on staple commodities in warehouses (domestic warehouse credits). During the business depression of the early 'thirties, there was proportionately less decline in the amount of outstanding acceptances of this kind than in any other category. The use of acceptance credits to finance the holding of goods in warehouses prior to shipment or sale is generally regarded as a sound practice, although, unfortunately, it lends itself to misuse, particularly in the holding of goods for speculative purposes.

Acceptances drawn to create dollar exchange are peculiar to the United States and are used by bankers in certain countries where exports are of a decidedly seasonal character—notably Central America and South America—to create dollar balances during the season when exports decline. The drawer is obligated to provide the accepting bank with funds to pay the acceptance at maturity, and obtains the funds to do so from the proceeds of merchandise sold in the United States during the exporting season. Inasmuch as acceptances drawn to create dollar exchange are not based on actual shipment of goods, the Board of Governors of the Federal Reserve System has established strict rules and regulations governing their creation by member banks.

Accepting institutions. There are three primary institutional elements in the acceptance market: the accepting institutions, which create the supply of bills; the bill dealers, who "make the market"; and the purchasers, who provide the demand.

The member banks of the Federal Reserve System are the most important single group of *acceptors*. The Federal Reserve Act authorized member banks to create acceptances in an amount equal, at any one time, to not more than one-half of their paid-up capital stock and surplus. However, with the permission of the Board of Governors and subject to its regulations, member banks may create acceptances to the full amount of their capital and surplus. In addition, under regulations prescribed by the Board of

Governors, member banks may accept bills drawn to create dollar exchange to the amount of 50 per cent of their capital and surplus. Besides the member banks there are a number of private banking firms, as well as foreign banking corporations and American agencies of foreign banks, engaged in creating acceptances.

The acceptance business has come to be concentrated more and more in the hands of a comparatively few leading financial institutions located in New York City and, to a lesser extent, in other large eastern cities.

Bill dealers. The *bill dealers* consist of a group of private bankers and financial firms which do a general business as middlemen in the money market. They usually deal in securities as well as acceptances, while some dealers act as brokers for commercial paper and as intermediaries in placing collateral loans and Federal funds. Most of the bill dealers are located in New York, and less than a dozen firms do the bulk of the acceptance business.

The function of the bill dealer is to purchase bills from the drawers, accepting institutions, or other holders, and to distribute them to investors. Normally the dealer sends to prospective buyers a daily offering sheet listing the acceptances offered, with the name of the accepting bank, the amount offered, the due date, the number of days to run, the denomination and lot number, and the rate at which the acceptances are offered. The dealers buy bills outright and derive their profit by selling them at a slightly higher price, usually one-eighth to one-quarter of one per cent above the buying rate. They are required to add their indorsement on bills sold to the Federal Reserve banks, but do not indorse bills sold to other buyers unless especially requested to do so. Bills bearing a dealer's indorsement command a slightly lower rate (higher price). Dealers ordinarily quote uniform rates on eligible bills accepted by banks of first-class credit standing. Somewhat higher rates are quoted on ineligible bills (bills not eligible for discount at the Reserve banks) and bills accepted by less well-known banks.

Purchasers. The principal *purchasers* of bankers' acceptances are the commercial banks, the Federal Reserve banks, and, to a lesser extent, savings banks, insurance companies, and other financial institutions. Bills drawn in accordance with the regulations of the Board of Governors of the Federal Reserve System (eligible bills) are generally recognized as among the safest and most liquid of short-term credit instruments, and it is a general practice for commercial banks to include some acceptances among their second-

ary reserves. Legislation has been enacted in a number of states permitting savings banks and insurance companies to invest in bankers' acceptances.

The distribution of bankers' acceptances among the various types of buyers is determined largely by prevailing market conditions. In periods of credit stringency and high interest rates, banks reduce their holdings of acceptances in order to have funds available for other purposes. At such times a large part of the bills outstanding are shifted to the Reserve banks. On the other hand, during periods of low money rates, when banks have difficulty in finding profitable employment for their funds, they prefer to buy bills, which they have accepted, from the drawers and to increase their bill holdings by purchases in the open market.

Thus, at the end of July, 1929, the Reserve banks held (both for their own account and for the account of foreign correspondents) about 47 per cent of all bills outstanding, while, at the end of May, 1945, they had no dollar acceptances in their portfolio. On that date the accepting banks held 79 per cent of the dollar acceptances outstanding. In April, 1934, the supply of bills offered in the market was so small that the bill dealers instituted discriminatory rates against banks which made a practice of buying their own bills from the drawers and withholding such bills from the market.

Federal funds market. Federal funds are sight claims on the Reserve banks or the United States Treasury, and consist of checks drawn on the Reserve banks, cashiers' checks of the Reserve banks, and checks of the United States Treasury. The Reserve banks give immediate deposit credit for such claims. Thus a bank that is deficient in reserves may temporarily increase its reserve balance by exchanging its own cashier's check for a check on a Federal Reserve bank drawn by another bank having excess reserves. Deposit of the check drawn on the Federal Reserve bank (Federal funds) immediately increases the reserve balances of the borrowing bank, while its own cashier's check must go through the clearing house and is not debited to its account at the Federal Reserve bank until the following day.

In practice it is not necessary for the lending bank actually to draw a check on the Reserve bank; it may simply ask the Reserve bank to debit its account for the amount of the loan and to credit that of the borrowing bank. The borrowing bank actually obtains for one day a loan of Federal funds, which is repaid when its cashier's check for the same amount, plus one day's interest, is cleared

and credited to the account of the lender at the Reserve bank. In case a loan of Federal funds is made on Saturday or on the day before a holiday, the borrower's check is not cleared until the second day and the loan is actually for two days.

Short-term Government securities. Closely related to the capital market but from the financial standpoint a division of the money market, is the market for short-term Government securities. These include Treasury bills and Treasury certificates of indebtedness. Both are short-term credit instruments, maturing in one year or less. Treasury bills bear no interest and are traded in on a discount basis, while certificates of indebtedness are interest-bearing and are traded in on a price-plus-accrued-interest basis, as are long-term bonds. In addition, long-term obligations of the Government, currently having a year or less to mature, have the characteristics of short-term credit instruments, and are regarded in the money market as in much the same category as Treasury bills and certificates.

Since shortly after the United States entered the First World War, the Treasury has regularly issued certificates of indebtedness to cover its temporary financial needs, but in normal times the amount outstanding has not fluctuated widely from year to year. Treasury bills did not become a regular instrument of Treasury financing until December, 1929, after an act of June 17, 1929, amended the Second Liberty Loan Act to authorize their issuance. Treasury bills have since been used more and more extensively to supplement the certificates. During the war the volume of bills and of certificates outstanding increased very rapidly.

Both types of Government obligations are offered for public subscription through the Federal Reserve banks. The certificates bear a stipulated rate of interest and are offered at par and accrued interest, while bills, bearing no interest, are sold on a discount basis to the highest bidders. Obviously the fixing of the interest rate on the certificates at such a figure as to obtain subscriptions for the full amount at the lowest possible cost to the Treasury requires very accurate judgment of money market conditions. The bills, on the other hand, are a more flexible instrument of financing. By offering them for competitive bidding, the Treasury is assured of the best terms warranted by the condition of the money market at any given time.

Since Treasury bills and certificates possess in high degree the attributes of safety and marketability, they constitute an excellent

medium for the investment of short-term funds by banks and other financial institutions. In the past the short-term Government securities market has at times been overshadowed by the collateral loan market and even by the acceptance market. However, since the depression of the 'thirties, the situation has been reversed. The volume of collateral loans and acceptances outstanding declined sharply from the peak of 1929, while the amount of short-term Government securities greatly increased until the latter market came to be by far the most important of the individual money markets.

Commercial paper market. The commercial paper market is the oldest of the short-term money markets and the one most indigenous to the United States. It is the market for promissory notes of well-known business concerns of high credit standing, usually unsecured and unindorsed. Commercial paper is usually issued in denominations of \$2,500 and multiples thereof, ordinarily matures in four to six months, and bears interest at some stipulated rate. Usually commercial paper is based solely on the credit of the maker; but occasionally such paper is indorsed by a parent or affiliated concern or by an individual of considerable wealth, and sometimes it is secured by collateral.

The use of commercial paper is limited for the most part to well-established firms engaged in the manufacture or sale of staple commodities and capitalized at \$250,000 to \$10,000,000. Smaller firms are not sufficiently well known for their paper to be widely acceptable, and larger concerns have access to the securities market and banking connections which make the use of commercial paper unnecessary. Unlike trade bills and bankers' acceptances, commercial paper is not drawn to finance a specific sale or transaction. To a large extent it is used to provide additional working capital for meeting pay rolls, for purchasing materials, and for paying general operating expenses during periods of seasonal business activity. It is estimated that about 60 per cent of the commercial paper drawn is of a seasonal character. Thus it supplements the regular lines of credit of the issuers at their banks and often enables them to obtain additional funds at lower cost than at the banks.

Commercial paper is marketed through the so-called commercial paper houses, which buy the paper direct from the issuers. There were some three dozen firms in the United States handling commercial paper, along with other types of short-term credit instruments. Of these, seven did more than 50 per cent of the business. These

firms do not, except in rare instances, indorse the paper they sell, but they carefully investigate and constantly check the credit standing of the makers, since their own business reputation depends on the quality of the paper they handle. Their income is derived from the commission of one-fourth of one per cent charged the seller for distributing the paper. Commercial banks, particularly the country banks, are practically the sole buyers of commercial paper.

Although interest rates on commercial paper vary widely with changing conditions in the money market, they are usually the highest of the open-market rates. During recent years the rate on prime paper of four to six months' maturity has ranged from $6\frac{1}{4}$ per cent in 1929 to as low as one-half of one per cent in 1939. Rates are not uniform, but vary with the credit standing of the maker

From the standpoint of the volume of paper outstanding, the commercial paper market is the least important of the individual money markets. Furthermore, its importance has declined steadily since shortly after World War I. According to figures reported to the Federal Reserve Bank of New York by about twenty leading commercial paper houses, the amount outstanding gradually fell from a peak of \$1,296,000,000 in January, 1920, to only \$60,000,000 in May, 1933. After the latter date there was some increase as a result of the expansion in business activity, and the amount reported outstanding at the end of December, 1944, was \$166,000,000.

Collateral loan markets. The market for loans secured by stocks and bonds, or collateral loans, is the most geographically diversified and most loosely organized of the short-term money markets. In the broadest sense, this market includes loans, by lenders of all kinds to borrowers of all descriptions, secured by stocks and bonds. However, in the narrower and more popular sense, the term means the market for collateral loans to brokers and dealers in securities, either on call or for a comparatively short period of time. It is this phase of the collateral loan market in which the characteristics of an organized short-term market are most highly developed, and with which this chapter is primarily concerned.

Purposes of collateral loans. Since the great stock market boom of 1927-1929, the term *collateral loans*, or brokers' loans, has been closely associated in the mind of the public with speculation in securities. It is true that in periods of speculative activity a large portion of the collateral loans outstanding is made to finance specu-

lative purchases of securities, but this is only one of the several purposes for which such loans are contracted. In a study made for the sub-committee of the Senate Committee on Banking and Currency investigating the operation of the national and Federal Reserve banking systems, the chief purposes of collateral loans were summarized as follows:

1. Carrying of securities by dealers pending distribution to investors.
2. Carrying of securities with intention of reselling them at a rise in price, to permit payment of loan out of proceeds.
3. Carrying of securities for long-term investment—borrower expecting to liquidate loan gradually out of income.
4. Carrying of securities for indefinite periods for purpose of corporate control, and so forth.
5. For business, agricultural, and commercial uses.
6. For consumption purposes

In addition, it may be noted that banks often obtain from their correspondent banks loans which are secured by collateral.

Borrowers and lenders. It is apparent from the diversity of purposes of collateral loans that there is a great variety of borrowers in the collateral loan market. The group includes not only brokers, dealers in securities, investment bankers, and financial companies, but also ordinary business concerns as well as private individuals. On the other hand, commercial banks are almost the only lenders. At times in the past when interest rates were unusually high, other lenders than banks placed considerable amounts of funds in the collateral loan market; however, during the last few years of very low interest rates, particularly since the passage of the Banking Act of 1933, these other lenders have disappeared.

Under these circumstances the regular reports to the Federal and State banking authorities by the commercial banks of the United States throw considerable light on the amount and nature of the collateral loans outstanding from time to time. In the Member Bank Call Report issued by the Board of Governors, which includes reports of all member banks of the Federal Reserve System (owning almost two-thirds of all the banking resources of the United States), and in the reports of the Federal Deposit Insurance Corporation covering over 90 per cent of all commercial banks, loans are classified in nine categories: (1) commercial and industrial loans, including open market paper; (2) loans on agricultural commodities covered by purchase agreements of Commodity Credit Corporation; (3) other agricultural loans; (4) loans to brokers and dealers in securities; (5) other loans for purchasing or carrying

securities; (6) real-estate loans; (7) loans to banks; (8) consumer loans to individuals; (9) all other loans.

Collateral loans to banks. It has long been the custom for banks to borrow among themselves to meet temporary demands for funds. Since banks often leave securities in the custody of their correspondents, it is a comparatively simple matter to arrange a loan with these securities as collateral. Loans on securities to banks differ in one important respect from other classes of security loans that is, the collateral consists almost exclusively of bonds, since banks may not own stocks except under special circumstances. The collateral for other loans, on the contrary, often consists to a very large extent of stocks, except on those made for the purpose of carrying Government securities.

The movement of collateral loans to banks is usually from the banks in larger financial centers to the banks in smaller communities. During periods of seasonal demand for funds the country banks customarily borrow from their big city correspondents, and at the close of the season, to clear up their obligations to banks, they use the funds obtained from the repayment of customers' loans. It is obvious that country banks do not borrow for speculative purposes, or to any great extent make loans to customers for speculative purposes. Hence, this type of collateral loan is generally regarded as intended primarily for financing agriculture, industry, and commerce. Collateral loans to banks represent only a comparatively small portion of the total loans on securities, and the amount varies principally with the demand for bank credit in the interior of the United States.

Loans to others. Collateral loans by banks to others than banks, brokers, and dealers constituted in the past by far the greater part of the collateral loans outstanding. From 70 to 85 per cent of all collateral loans by member banks have been of this type. In recent years the percentage decreased considerably, and on December 30, 1944, other loans for purchasing or carrying securities accounted for 48.4 per cent of total member bank collateral loans. Nevertheless, the market for loans to others is not an organized open market. Each loan is a private transaction between the lending bank and the individual borrower, and the terms of the loan depend upon the relation between the parties concerned and the type of collateral offered.

Loans in this category may be divided into two broad groups: (1) loans for business purposes, and (2) loans for the purpose of

carrying securities. Ordinarily business concerns borrowing money from banks to cover temporary working capital needs do so under a "line of credit" arrangement, which may or may not require collateral. However, in many cases where the credit standing of the borrower is not of the highest, banks ask that some security be pledged. Also, there are times when concerns wish to borrow sums in excess of their established lines of credit, and collateral is often pledged for the extra amount. It is of course impossible to ascertain exactly what use a business concern makes of funds obtained through a collateral loan, but it is fair to assume that by far the greater portion is devoted to regular business purposes.

Brokers' loans. Although loans to brokers and dealers in securities represent but a comparatively small portion of the total collateral loans in the credit structure of the United States, there is an organized open market only for this type of collateral loan, and it is only the brokers' loan market which constitutes an integral part of the New York money market.

The brokers' loan market deals in two standard types of collateral loans: (1) call loans, and (2) time loans. *Call loans* are made on a day-to-day basis with the lender having the privilege of demanding repayment the next business day after the loan is made. If the loan is not called, it is automatically renewed for another day. In practice, call loans are often allowed to run for months. *Time loans*, as the term indicates, are made for a specified period of time, usually three months, and may not be called during that period, provided the borrower maintains adequate collateral.

It is obvious that lenders cannot safely advance an amount equal to the full market value of the securities pledged, since the result of even a slight decline in market prices would leave the loan inadequately secured. Consequently it is the established practice to require that the market value of the collateral be somewhat greater than the amount of the loan, in order to provide a *margin* of safety for the lender.

The regulations of the New York Stock Exchange have long stipulated certain minimum margin requirements to be observed by the brokerage firms of its members. However, the entire matter of margin requirements was placed, by the Securities Exchange Act of 1934, under the supervision of the Board of Governors of the Federal Reserve System.

Loans to carry United States Government securities. During the war, when Government borrowing increased rapidly, loans made

by banks to enable brokers and dealers in government securities to carry such obligations on margin assumed at times very large proportions. As a rule the loans increased shortly before and during the war-loan drives and decreased between drives. Beginning March 31, 1943, the New York Stock Exchange has been reporting monthly separate figures for member-firm borrowings on United States Government obligations.

Securities Exchange Act of 1934. In accordance with this Act, the Board of Governors, on September 27, 1934, issued Regulation T, governing the extension and maintenance of credit by brokers, dealers, and members of national securities exchanges. The Regulation originally followed the standard laid down in the Act in establishing the maximum loan value¹ of a registered security as whichever was the higher of:

- (1) 55 per cent of the current market value of the security; or
- (2) 100 per cent of the lowest value of the security computed at the lowest market price therefor during the period of 36 calendar months immediately prior to the first day of the current month, but not more than 75 per cent of the current market value.

It was provided, however, that until July 1, 1936, the lowest price at which the security had sold on or after July 1, 1933, but prior to the first day of the current month, should be considered as the lowest market price of such security during the preceding 36 calendar months.

This optional plan proved complicated in practice and, in the opinion of the Board of Governors, established too high a maximum loan value. Since the Board is empowered by the Act to increase or lower the margin requirement, a Supplement to Regulation T was issued, effective April 1, 1936, which reduced the maximum loan value of a security to 45 per cent of its current market value. On October 27, 1937, the Board raised the maximum loan value to 60 per cent, effective November 1, 1937. The maximum loan value was reduced to 50 per cent, effective February 5, 1945; to 25 per cent, on July 5, 1945; and again to zero, on January 1, 1946.

There are certain exceptions to this general rule. In the first place, a creditor may extend credit on any registered security, in a specialist's account in an amount up to 50 per cent of the current market value of such security.

¹ "Maximum loan value" is defined as the maximum amount of credit which at any time may be extended on a security by a creditor

Second, a participating creditor may extend credit in a special account to any dealer for the purpose of financing the distribution of an issue of securities at wholesale or retail, or to any group, joint account, or syndicate for the purpose of underwriting or distributing an issue of securities.

Third, loans recorded in a special account and used solely to finance bona fide arbitrage transactions in securities are exempt from the provisions of the Regulation.

Customers' short sales must be covered by a margin of 100 per cent of the current market price of the securities sold, except that the margin required in specialists' accounts is only 50 per cent.

A fourth exception is the provision that any member, or group of members, of a national securities exchange may, with the approval of any regularly constituted committee of the exchange having jurisdiction over the business conduct of its members, make loans to meet the emergency needs of any other member or of a broker or dealer transacting business through the medium of such member.

The regulations governing collateral loans by brokers and dealers exempt certain securities: direct obligations of the United States; securities issued or guaranteed by corporations in which the United States has a direct or indirect interest; securities which are direct obligations of, or obligations guaranteed as to principal or interest by, a State, or any municipal corporate instrumentality of one or more States; and such other securities as the Securities and Exchange Commission may specify.

The Board of Governors also issued Regulation U, effective May 1, 1936, governing certain types of collateral loans made by banks. It prohibited any bank from making a loan secured by any stock *for the purpose of purchasing or carrying any stock registered on a national securities exchange* in an amount exceeding 45 per cent of the current market value of the pledged security. An amendment to Regulation U provided that, effective November 1, 1937, *the maximum loan value of any stock, whether or not registered on a national securities exchange, shall be 60 per cent of its current market value, as determined by any reasonable method.* This maximum loan value is subject to change by the Board, and there are certain exceptions to the rule.

The regulation did not restrict the right of a bank to extend credit, whether on securities or otherwise, for any commercial, agricultural, or industrial purpose or for any other purpose except the

purchase or carrying of stocks registered on a national securities exchange. It did not apply to any loan outstanding prior to its effective date, and eleven special types of loans were exempted from the rule.

It was provided that a stock, if registered on a national securities exchange, shall have a special maximum loan value of 75 per cent of its current market value in the case of a loan to a broker or dealer who is subject to, or complies with, Regulation T, provided the hypothecated securities are carried by him for the account of his customers other than his partners.

Lenders and borrowers. Chief among the lenders in the brokers' loan market are the large New York City banks, although a considerable amount is loaned by banks in other cities through the agency of their New York correspondents. In the past, particularly during the stock market boom of 1927-1929, a large amount of funds was placed in the market by others than banks. These other lenders included chiefly business corporations, investment trusts, foreign banks, and private individuals. Most of the loans for others were placed through banks, in the same manner as loans for out-of-town banks; but some loans were placed directly by the lenders with brokers and dealers.

Past experience has shown that these loans by others constituted an extremely unstable and dangerous element not only in the money market, but even in the entire credit structure of the United States. In the first place, loans of this character were not subject to control by the Reserve bank authorities. When in 1928 and 1929 the Federal Reserve Board endeavored to check the expansion of credit for speculative purposes, it was more or less successful in preventing further increases in the volume of collateral loans by member banks to brokers and dealers, but its efforts were largely nullified by the rapid increase in brokers' loans by others than banks. This result was due to the fact that loans for account of others involve simply a transfer of deposits from lender to borrower, without any additional expansion of bank credit, while an increase in brokers' loans by banks does result in an increase in deposits. Since member banks are required to maintain with the Reserve banks fixed reserves against deposits, such credit expansion is subject to some degree of control by the Federal Reserve authorities, whereas loans for account of others are not.

Second, these other lenders proved utterly devoid of any sense of responsibility for the maintenance of an orderly money market.

Under the stimulus of extraordinarily high interest rates, loans placed by the New York reporting banks alone "for account of others" reached a peak of \$3,941,000,000 on October 9, 1929. As the stock market collapsed and security prices declined precipitously, the other lenders hastened to call their loans, and in the course of the next four weeks loans placed "for account of others" by the New York reporting member banks alone declined by \$1,542,000,000. But for the action of the New York banks in replacing these funds by increased loans for their own account, the consequences on the stock market might have been disastrous.

Under these circumstances it is not surprising that measures to restrict loans "for account of others" were soon forthcoming. In the latter part of 1931 the New York Clearing House Association passed a rule prohibiting its members from making collateral loans "for account of others." The Banking Act of 1933 prohibited all member banks, in making loans on securities to brokers and dealers, from acting as agents for others than banking institutions.

Finally, the Securities Exchange Act of 1934 provided that brokers doing business on a national securities exchange may borrow on registered securities only from member banks and non-member banks which have filed with the Board of Governors of the Federal Reserve System an agreement to comply with all the provisions of the Act, except as otherwise permitted by the Board.

The brokers and dealers in securities, who constitute the demand element in the market, borrow for two purposes. First, they borrow to finance the margin accounts of their customers. Speculators in the stock market often desire to purchase a larger amount of securities than they can pay for with their own funds. They are able to do this by borrowing a part of the purchase price from brokers and pledging as collateral the securities bought. However, brokerage houses do not usually have sufficient capital to enable them to advance their own funds to their customers for this purpose. Consequently these houses borrow from banks, using the customers' securities as collateral.

Second, dealers in securities and brokerage houses which engage in the secondary distribution of securities often borrow from banks to finance the carrying of securities in their own portfolios pending distribution to investors.

In periods of comparatively easy money market conditions the borrowers and lenders have little difficulty in arranging loans directly. However, in periods of speculative activity, when the de-

mand for collateral loans is relatively large, there is a need for special intermediaries. Hence there has resulted the development of middlemen, known as *money brokers*, who for a small commission arrange loans for borrowers. In recent years, however, the demand for brokers' loans has been so small, in relation to the amount of funds available, that these services have been superfluous. Moreover, the outlawing of loans for others will undoubtedly militate against their becoming an important element in the market in the future. Further, special facilities have been created by both the New York Stock Exchange and the New York Curb Exchange for arranging call loans. Both exchanges operate *money desks* where banks may offer funds on call, either directly or through an exchange member, and where member firms may apply for accommodation. The exchanges do not handle time loans.

Rate structure. The rate structure of the brokers' loan market is rather complex. There are actually three different rates applicable to different types of transactions: (1) the rate on new call loans, (2) the renewal rate on call loans, and (3) the rate on time loans. There is some lack of uniformity in rates for each of the types of transactions. Rates charged by some banks may vary slightly from those charged by others, and individual banks often have different rates for different borrowers. The rates posted at the New York Stock Exchange for new call loans and for renewals are usually taken as the open market rates, but these rates are often out of line with rates being charged by banks. The rate charged by banks to brokers and dealers in government securities is lower than the official call rate.

Statistics on brokers' loans. The data, computed and published periodically by several agencies, on amounts of security loans to brokers and dealers outstanding, together with the regularly published open-market rates, afford the principal basis for observing and interpreting developments in the brokers' loan market. Unfortunately none of the statistical reports includes all the loans in the market.

The most comprehensive report is the Member Bank Call Report issued by the Board of Governors for each of the member bank call dates, of which there are three or four a year. However, for current use more frequent statistics are desirable. The New York Stock Exchange publishes monthly a report of collateral loans contracted by its members. As indicated on this page, this report classified loans according to type of lender: (1) loans from New

NEW YORK STOCK EXCHANGE MEMBER TOTAL NET
BORROWINGS ON COLLATERAL

(In millions of dollars)

Date	From New York Banks and Trust Cos.	Per Cent of Total	From Private Bankers, Brokers, Foreign Bank Agencies, and Others in New York City		Per Cent of Total	Total
January 1, 1927 . .	2,803 6	85 14	489 3		14 86	3,292 9
January 1, 1928 . .	3,811 8	85 99	621 1		14 01	4,432 9
January 1, 1929 . .	5,400 8	83 87	1,038 9		16 13	6,439 7
January 1, 1930 . .	3,369 7	84.46	619 8		15 54	3,989 5
January 1, 1931 . .	1,694 3	89 47	199 3		10 53	1,893 6
January 1, 1932 . .	454.7	77.44	132.5		22 56	587.2
January 1, 1933 . .	278 9	80.42	67 9		19 58	346.8
January 1, 1934 . .	775 9	91 81	69 2		8 19	845 1
January 1, 1935 . .	813.1	92.37	67.2		7 63	880 3
January 1, 1936 . .	907.0	96.65	31 4		3 35	938.1
January 1, 1937 . .	1,011 4	96 19	40 0		3 81	1,051 4
January 1, 1938 . .	627 9	95 24	31 3		4 76	659.2
January 1, 1939 . .	875.0	94.14	42.0		5 86	717 0
January 1, 1940 . .	548.0	92.25	46 0		7.75	594.0

Source New York Stock Exchange Bulletin

York banks and trust companies, and (2) loans from private bankers, brokers, foreign bank agencies, and others in New York City. The report also showed the amount of both time and demand loans. This series of figures was discontinued, and the Stock Exchange reports currently monthly figures for total member-firm borrowings on United States Government obligations and other collateral. At the end of June, 1945, the former amounted to \$480,000,000, and the latter to \$693,000,000.

The third and most frequent report on brokers' loans is the weekly statement of reporting member banks in 101 leading cities. Although this statement includes a smaller number of banks than the reports of the Federal Deposit Insurance Corporation and the member bank call reports, it contains the loans of the largest banks of the country and indicates weekly any changes in the volume of funds in the market. The classification of loans in this statement is the same as that of the member bank call report described in this chapter.

Questions for Study and Review

1. What are the components of the New York money market?
2. What is the principal function of a money market?
3. Which type of acceptance is sound?
4. Why did foreign acceptance credits become frozen in Germany?

- 5 What factors caused the sharp decline in the volume of acceptances and commercial paper?
- 6 What rôle do the Federal Reserve banks play in the acceptance market?
- 7 When is the rate for Federal funds higher than the discount rate?
- 8 What can bring about an increase in the volume of brokers' loans?
- 9 What margin requirements were imposed by Regulations T and U of the Board of Governors of the Federal Reserve System?
10. Why are loans for account of others considered dangerous?

Problems

- 1 Classification of Bankers Acceptances outstanding on:

	<i>April 30, 1929</i>	<i>January 31, 1940</i>	<i>May 31, 1945</i>
Imports	\$ 324,090,639	\$100,820,820	\$ 72,000,000
Exports	376,864,088	38,251,405	9,000,000
Domestic	16,159,905	7,831,084	22,000,000
Warehouse credits	99,461,661	43,022,702	
Dollar exchange	45,051,171	16,356,173	—*
Based on goods stored in, or shipped between, foreign countries	249,214,018	22,947,648	2,000,000
Total	\$1,110,841,482	\$229,229,832	\$105,000,000

* Less than \$500,000

- (a) Explain the nature and function of each class of acceptance.
- (b) Give reasons for the shrinkage of the amount of each class of acceptance.

2. John Doe orders the brokerage firm XYZ to buy for his account on the New York Stock Exchange 100 shares of American Telephone & Telegraph stock. The stock is purchased at \$170 per share.

- (a) Does John Doe have to pay the purchase amount in full?
- (b) Is the broker permitted to extend credit to John Doe? If so, what is the maximum amount?
- (c) What authority, if any, determines the maximum amount of credit?

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CHAPTER 20

Credit Control in the United States

Introduction. During the 1930's, the question of credit control assumed great importance in all leading countries of the world. The theory was gradually adopted that the central banks, through increased power over credit and banking, would be able to prevent sharp swings in the business cycle, and to stabilize business as well as commodity prices. As a result of that view, a number of laws were passed in the United States which materially increased the powers of the monetary authorities over banking and credit. The most important pieces of legislation of this character were the Banking Acts of 1933 and 1935 and the Securities Exchange Act of 1934. These three acts materially increased the powers of the Board of Governors of the Federal Reserve System, and virtually converted the Federal Reserve banks into a central banking system.

During the same period, several laws were passed which materially increased the powers of the Treasury and of the President of the United States over the money market. The more important of these laws were the Silver Purchase Act and the Gold Reserve Act, the latter providing for the establishment of the Stabilization Fund and giving the President the power further to devalue the dollar, which, if used, would further increase the dollar value of gold in the hands of the Treasury. In contrast, therefore, to the period prior to 1930, when credit control was vested primarily in the Federal Reserve banks, the powers of the Treasury over the money market were increased during the 'thirties so that the control over the money market, as well as over credit in general, was vested both in the Board of Governors of the Federal Reserve System and in the

Treasury. The powers of the individual Federal Reserve banks, however, decreased materially.

Powers of the Reserve authorities: (1) *Security loans.* The Securities Exchange Act of 1934 granted the Federal Reserve Board the power to determine the margins to be required by brokers and dealers in extending credit to their customers, and to prescribe margin requirements and regulations for loans granted by banks and other persons for the purpose of purchasing and carrying securities registered on national securities exchanges. This power of the Board is of the utmost importance in considering the future trend of interest rates. In the past an active stock market was always accompanied by an increase in the volume of brokers' loans. An increase in brokers' loans was closely followed by an increase in the call-loan rate, and this in turn affected all other short-term rates. Gradually the rise in the short-term interest rates affected the trend of long-term interest rates.

Under the present laws, the Board of Governors is in a position to curb the rise in security loans so that the activities of the stock market as well as the call-loan market can no longer exercise the same influence on interest rates, short-term as well as long-term, as they did in the past.

(2) *Powers over legal reserves.* The Board of Governors has the power to raise or lower reserve requirements within the legal limits. Raising of reserve requirements would not only reduce excess reserve balances, but would also be an indication that the Board was endeavoring to tighten the money market. Lowering of reserve requirements would increase excess reserve balances or enable member banks to reduce their borrowings at the Reserve banks. At a time when excess reserves were already large, further increase in them could have only a psychological effect on the market in that it would indicate that the Board of Governors was determined at all costs to maintain low interest rates.

(3) *Open market operations.* The Federal Open Market Committee, composed of all members of the Board and five annually elected representatives of the Federal Reserve banks, is in a position to engage in open market operations, that is, to order buying and selling of Government securities by the individual Federal Reserve banks. The selling of Government securities by the Federal Reserve banks or the nonrenewal of maturing Treasury bills held by them would bring about a reduction in reserve balances and simultaneously increase the supply of Government obligations to

be absorbed by investors. Such an action by the Federal Open Market Committee, therefore, would not only reduce excess reserve balances or force the member banks to borrow from the Reserve banks but would also have an adverse psychological effect, in that it would indicate that a change in the policy toward interest rates had taken place. It might also have an adverse effect on the Government bond market, particularly if the large investing institutions were called upon to absorb the securities offered by the Federal Reserve banks. Open market purchases by the Reserve banks would have the opposite effect because they would create additional excess reserve balances, institute additional demand for Government securities, and indicate that the Board was determined to maintain a low level of interest rates.

The Federal Open Market Committee can also influence the Government bond market by ordering the Federal Reserve banks to make changes in the various types of their Government securities holdings without affecting the total amount of such holdings. In periods when the long-term Government bonds show a tendency to decline, the buying of long-term bonds and the selling of Treasury bills or notes would tend to stabilize prices of long-term obligations. Similarly, the selling of long-term bonds and the acquisition of bills and notes would prevent the Government bond market from going up too rapidly.

Shifting operations by the Reserve banks are of particular importance at the present time in view of the changes that have taken place in the money market. In previous years, the banks (notably the money market banks) readjusted their cash positions primarily through the short-term money market. Banks in need of cash would ordinarily obtain it either through the calling of call loans or through the sale of open market paper. At the present time, however, the short-term money market, with the exception of the Treasury bill and certificate market, is practically at a standstill. Hence, the banks have adopted at various times the policy of readjusting their cash position through the long-term Government bond market. This was clearly recognized by the Board of Governors of the Federal Reserve System when, in its annual report for 1937, it stated: "In recent years the bond market has become a much more important segment of the open money market, and banks, particularly money-market banks, to an increasing extent use their bond portfolios as a means of adjusting their cash position to meet demands made upon them. At times when the demands increase,

they tend to reduce their bond portfolios, and at times when surplus funds are large, they are likely to expand them. Since prices of long-term bonds are subject to wider fluctuations than those of short-term obligations, the increased importance of bonds as a medium of investment for idle bank funds makes the maintenance of stable conditions in the bond market an important concern of banking administration." During World War II the Reserve authorities relied primarily on open market operations to create additional reserve balances.

Powers of the Government: (1) *Exchange Stabilization Fund.* The Treasury, as the sole administrator of the Stabilization Fund, has in its possession \$1,800,000,000 of gold. The Gold Reserve Act of 1934, which created the Exchange Stabilization Fund, stipulated in part: "The Secretary of the Treasury with the approval of the President—directly or through such agencies as he may designate—is authorized, for the account of the fund established in this section, to deal in gold and foreign exchange and such other instruments of credit and securities as he may deem necessary to carry out the purpose of this section.

"The fund shall be available for expenditure, under the direction of the Secretary of the Treasury and in his discretion, for any purpose in connection with carrying out the provisions of this section including the investment and reinvestment in direct obligations of the United States of any portions of the fund which the Secretary of the Treasury, with the approval of the President, may from time to time determine are not currently required for stabilizing the exchange value of the dollar."¹

Obviously, if the Treasury utilized the gold in the Stabilization Fund to buy Government securities, it would increase reserve balances. The Treasury can also influence the money market through the issuance of silver certificates as well as through the shifting of balances from the commercial banks to the Reserve banks, and vice versa.

(2) *Thomas Amendment.* The Thomas Amendment to the Emergency Farm Mortgage Act of May 12, 1933, vested the President of the United States with broad powers over the money market. Under it the President could instruct the Secretary of the Treasury to enter into agreements with the Federal Reserve Board and Federal Reserve banks whereby the Board will permit the Reserve banks to agree (1) to conduct throughout specified periods

¹ The Exchange Stabilization Fund expired by limitation on June 30, 1945.

open market operations in United States Government direct and guaranteed obligations and (2) to purchase directly, and hold in portfolio for an agreed period of time, additional Treasury bills or other United States Government obligations in an aggregate sum of \$3,000,000,000. If the Secretary were unable to obtain the consent of the Reserve authorities to these operations, or if the operations proved to be inadequate, or if for any other reason additional measures were required in the judgment of the President, then the President was authorized to direct the Secretary of the Treasury to cause to be issued United States notes up to an aggregate amount of \$3,000,000,000 to be used for meeting maturing Federal obligations and purchasing United States interest-bearing obligations. This power of the President was repealed on June 12, 1945.

The President also had the power further to devalue the dollar to 50 per cent of its original parity, and such devaluation would have given the Treasury an additional profit of over \$3,200,000,000 on the basis of the gold held in the Treasury on January 31, 1940. This power expired June 30, 1943.

The increased powers of the government over the money market were not a development restricted to the United States. In practically every country the central bank policies are dominated by the treasuries, and it makes no difference whether the central banks are privately owned, as the Bank of England; or owned by the member banks, as is the case in the United States; or owned jointly by the government and the banks, as in Argentina; or owned by the government, as is the case in Sweden and Canada.

Managed currency: (1) *Definition.* Generally speaking, managed currency means the utilization by a government of its monetary and fiscal powers for the purpose of influencing business conditions at home. Under a system of managed currency, money and banking, evolved for the purpose of facilitating the exchange of goods and services, cease to be merely handmaidens to industry and trade, and become instruments for executing economic, fiscal, and social policies of the government. Whether this development will be for the ultimate good or ill of the countries involved will depend not only on the mechanism of management but also upon the skill, wisdom, and farsightedness of the money managers. Moreover, managed currency, to be effective, requires not only greater control by the government and the central bank over the money market, but also a closely knit money-market mechanism, a well-coördinated banking system, and close coöperation among the govern-

ment, the central bank, and the banking and other financial institutions. It also requires a certain degree of coöperation between business and the government and between capital and labor. Without these prerequisites, the efforts of the government to iron out business fluctuations through monetary measures will be of little avail.

Currency management in all countries where practised is exercised by the treasury and the central bank acting in unison. The function of regulating external monetary relations has been transferred from the central banks to government bodies created for that purpose. These institutions, called Exchange Equalization or Stabilization Funds, have been established with relatively large resources derived either from borrowing or from "profits" resulting from the revaluation of gold holdings of central banks. These "Funds" are administered by the treasuries, directly or indirectly. Their purpose is to insulate the domestic credit structure against economic and financial developments abroad, and to free the central bank from the obligation of using its gold stock and discount policy for the protection of the international value of the currency.

(2) *Instruments of managed currency*: (a) *Interest rates*. The interest-rate policy of the United States monetary authorities is based on the belief that low interest rates are a direct and powerful incentive to business activity. Conversely, high interest rates are assumed to deter intended business ventures requiring borrowed funds. The maintenance of low interest rates has been one of the principal features of managed currency in the United States. The reason for the low interest-rate policy is presented in the argument that if less is paid to owners of capital, more will become available for payment of wages and taxes. This policy would tend to increase production of consumption goods and curtail production of capital goods, which result in turn, it is believed, would shorten the swings of the business cycle. This is the indirect but the fundamental objective of the low interest-rate policy. In this respect the policy has been consistent, despite the temporary efforts to contract the volume of excess reserve balances during the second half of 1936 and the first half of 1937. The low money rate policy was maintained throughout the war, primarily in order to prevent a drastic increase in the public debt burden.

(b) *Fiscal policy—The Federal budget*. In its broader aspect, managed currency embraces also the fiscal policies of the Government. Even orthodox economists have accepted the theory that

in times of general economic depression the Government should incur budgetary deficits as a deliberate fiscal policy in order to stimulate business recovery. It is argued that in a period of business recession, when the volume of bank loans and deposits declines, the Government should create new purchasing power in the form of bank deposits through the sale of bonds to the banks for financing its deficit. The increase in bank deposits that took place from 1933 to July, 1936, was due mainly to the purchase of Government securities by the banks.

As a result of the fiscal policies adopted, the gross direct debt of the Federal Government increased to \$42,109,751,669 at the end of January, 1940, and was expected to rise to \$44,457,845,210 by the end of June, 1940. During World War II the Federal debt rose sharply, reaching \$259,115,345,802 on June 30, 1945. On August 13, 1945—the date on which Japan accepted the surrender terms of the United States, Great Britain, the Union of Soviet Socialist Republics, and China—the gross public direct and guaranteed debt amounted to \$263,034,397,117. Interest paid on the public debt during the fiscal year ended June 30, 1945, amounted to \$3,616,686,048. This debt, although it is staggering, is not beyond the carrying capacity of the country. There is, however, the danger that the Government may in the future again incur huge deficits whenever business conditions turn downward. Such a policy would be justified if during periods of business recovery and mounting tax revenues the Government were to reduce its debt. Unless this is done, the public debt will continue to grow with adverse effects on the purchasing power of the dollar.

(c) *Tax policy.* In addition to the budgetary policy employed by the Government as a means of influencing business conditions, certain taxes were introduced which gave the Government considerable power over business and hence may be regarded as instruments of managed currency. One of the more important of these is the tax for old-age benefit payments provided by the Social Security Act. Under this Act, as amended, the Government will, during the next few decades, accumulate large amounts in the Federal Old-Age and Survivors' Insurance Trust Fund, which replaced the Old-Age Reserve Account. The Old-Age and Survivors' Insurance Trust Fund not only increases the power of the Government over the volume of bank deposits, but also enables the Government to direct the flow of capital into desired channels.

The funds accumulated in the Old-Age and Survivors' Insurance

Trust Fund can be used for credit-control purposes only when the Federal budget has been balanced and the funds obtained from social-security taxes are no longer used to meet the Government deficits. Up to the present time the excess of social-security revenues over expenditures has been used to cover the budgetary deficits. Once the budget has been balanced, however, the Treasury will be in a position to utilize the funds accumulated in the Old-Age and Survivors' Insurance Trust Fund for the purpose of credit control. It may issue special 3 per cent obligations to the Old-Age and Survivors' Insurance Trust Fund and utilize the proceeds for retirement of maturing Treasury bills, notes, and bonds, or buy for the Account in the open market direct and fully guaranteed Government obligations whenever they sell to provide an investment yield of not less than 3 per cent per annum. The effect of these operations would be a reduction in the volume of Government securities held by the banks and a corresponding decrease in deposits. This power of the Treasury will be very useful if a boom should develop after the war and the Treasury, as well as the Reserve authorities, should decide to check it through reduction of bank deposits or the prevention of further expansion of deposits. This would be the case particularly during a period of rising bank loans.

The mandatory investment of the funds of the Account not required to meet current withdrawals could also be used to support the Government bond market. The net effect of such a development would be a gradual shift in ownership of the Government debt from the public, including banks and other financial institutions, to the various funds, agencies, and corporations of the Government. At the end of April, 1945, Government agencies and trust funds held \$23,185,000,000 of United States Government direct and fully guaranteed securities, or about 10 per cent of the total interest-bearing securities.

The funds in the Old-Age and Survivors' Insurance Trust Fund could also be utilized by the Government for investment purposes in order to divert the flow of capital into certain channels. Thus, for example, instead of using the funds to reduce the public debt held outside the various governmental agencies, the government might invest them in low-cost housing, the construction of new Government-owned utilities and public works, or for other purposes. In essence, this would enable the Government to use taxes for the purpose of increasing its investments in fields hitherto operated primarily by private capital. The effect of such a procedure

would be that the debt held by the public would remain unchanged (unless ordinary budget surpluses make possible a reduction in the Government debt), the debt held by the Old-Age and Survivors' Insurance Trust Fund and the Unemployment Trust Fund would increase, and the assets held by the Government would increase. If these assets were self-supporting, no additional burdens would be placed on the taxpayers; but if these assets were not self-supporting, the interest on the increased amount of Government debt held by the Old-Age Trust Fund would have to be met by budgetary appropriations. This expense will be particularly burdensome because of the huge increase of the public debt during the war.

(d) *Financial agencies of the Government and the flow of capital.* The establishment in the past few years of a number of new financial agencies has also enabled the Government to exercise considerable influence over the flow of capital. Thus, by organizing the Federal Housing Administration, which insures eligible mortgages, the Government has created a demand for mortgages which was practically non-existent for some time prior to the commencement of operations by the Housing Administration. Institutions buy these mortgages not because of the value of the underlying property, but primarily because, in case of default, these securities are convertible into obligations unconditionally guaranteed by the Government as to principal and interest. The agencies created by the Government to meet short- and long-term financial needs of the farmer belong in the same category. Similarly, through the Reconstruction Finance Corporation the Government is in a position to finance enterprises which may or may not have been able to obtain the necessary funds elsewhere and to direct private capital into such enterprises by assuming part of the risk. During the war the number of special agencies established by the Government grew by leaps and bounds. In addition the Government financed the construction of numerous plants and other facilities. The post-war utilization of these facilities can and will exercise a powerful influence on the future economy of the country.

(e) *Tinkering with the currency—changing the gold content of the dollar.* The general belief prevails that the mainstay of managed currency is the power of the Government to vary the gold content of the currency or its international value in order to influence the price level as well as general business conditions. Although practically all countries in the world have devalued their currencies, the changing of the gold content of a currency has so far played but

a minor rôle in currency management. England suspended the gold standard not as a deliberate policy intended to help business conditions, but because it was forced to do so by the huge withdrawals of foreign funds throughout the summer of 1931. The only country that devalued the currency as a matter of policy and not of expediency, for the express purpose of influencing business conditions and to raise the price level, was the United States. However, even in the United States the experiment was terminated after several months, and the Gold Reserve Act of January 30, 1934, confined the gold content of the dollar within definite upper and lower limits. The price of \$35.00 per ounce of gold established on that date has thus far remained unchanged. While the United States in the second half of 1933 endeavored to raise the price level by the daily downward variation of the gold content of the dollar, no country, including the United States, dared to stem the upward trend of commodity prices by increasing the gold content of the monetary unit.

It has been argued that the increased production of gold stimulated by currency devaluation would cause an increase in prices of commodities, since in the past an increase in the amount of gold invariably led to such a development. However, those who take this view overlook the fact that the situation today is entirely different from that of the period which is usually considered in such comparisons, namely, 1900-1914. In the prewar period, whenever new gold discoveries were made and the production of gold increased, a considerable proportion of the yellow metal found its way into central banks, where it was used for credit purposes. Very little was heard about sterilization of gold at that time. Even though open-market operations were engaged in by some of the leading central banks, this was done only on rare occasions.

The decreased importance of gold is indicated by the fact that during World War II gold-mining activities were curtailed by diverting manpower and equipment to the extraction of ores needed in the production of implements of war. This was done despite the rapid growth in bank deposits and currency in circulation throughout the world.

While before 1914 the gold standard operated freely, and funds, as well as gold, tended to flow from countries with low rates of interest to countries where higher rates prevailed, in recent years no such flow of capital has taken place. On the contrary, prior to

1941, there was a constant flight of capital from all over the world to the United States, the country of lowest interest rates, where it merely swelled the already large amount of noninterest-earning deposits and increased excess reserve balances. The theory that a devaluation of the currency and an increase in the monetary stock of gold must have a favorable effect on commodity prices has not been upheld, and the variation of the gold content of monetary units as an instrument of managed currency is, at least for the time being, of very little importance.

The "100 Per Cent Reserve Plan." A number of drastic proposals for the revolutionary reorganization of the banking system of the United States have been advanced during recent years, under the title of the "100 Per Cent Reserve Plan." While these proposals differ very widely among themselves, both as regards broad principles and details, their common denominator is a requirement that commercial banks maintain a cash reserve of 100 per cent against their demand deposits. This cash reserve, in some versions of the plan, would consist of Government paper currency; in others, of balances with the Federal Reserve banks or some other central monetary authority.

The proposal has been given widest publicity, however, by Professor Irving Fisher's book, *100% Money*, published in 1935. Several other economists have since written favorably of the scheme, but the plan is most widely known and advocated in the form in which it was popularized by Professor Fisher.

Claimed benefits of the plan. Advocates of the "100 Per Cent Reserve Plan" in its diverse forms claim a number of advantages for their proposals. The more important benefits which, it is alleged, will result from the compulsory substitution of a 100 per cent reserve for the present fractional legal reserve requirements for commercial banks are:

- (1) The Government could determine the volume of bank deposits in the commercial banks of the country, through regulation of the amount of available cash the banks would have for the requisite 100 per cent reserve, or otherwise. At present, the volume of commercial bank deposits is determined chiefly by the aggregate volume of loans and investments of all the country's banks.

- (2) Such control over the volume of existing bank deposits, in turn, would enable the credit authorities to regulate the level of commodity prices and to foster business stability. Proponents of

the "100 Per Cent Plan" hold that the available supply of money, and particularly of bank deposits, is a determining factor in shaping the course of business conditions and commodity prices. Hence, they argue, the total of bank deposits should be fixed by a central Government agency, rather than by the uncontrolled lending and investing operations of thousands of individual banks.

(3) The Government would be relieved of the necessity of paying interest on a part of the outstanding national debt, in the most popular versions of the plan, since Treasury obligations now held by commercial banks would have to be replaced to a large extent with currency that would be needed by the banks if they were required to keep a 100 per cent reserve against their demand deposits.

How the "100 Per Cent Reserve Plan" would be applied. As outlined by Professor Fisher, the "100 Per Cent Reserve Plan" would be put into effect through making a number of drastic changes in the organization of the nation's banking system.

Each commercial bank would be divided into separate Checking and Savings Banks, or, at least, entirely distinct departments would be set up for each purpose. The Checking Bank would have to maintain a cash reserve of 100 per cent in currency against its deposits. The Checking Bank or Department could continue to make loans to replace those outstanding at the time the plan went into effect, under regulations made by the Monetary Authority. The Savings or Loan Bank, or Department, on the other hand, would receive time deposits against which only a 5 per cent legal reserve would be required. It alone would be able to make new loans and investments. The volume of new loans and investments would be limited to the amount of its own capital funds and savings or time deposits. Thus, under the "100 Per Cent Plan" the banks could no longer "manufacture" deposits, and their ability to increase loans would be determined by the growth of savings deposits.

The Checking Bank or Department would obtain the currency needed to provide a 100 per cent reserve against demand deposits from a Currency Commission, which would take over Government bonds and other acceptable assets in exchange. This Currency Commission, which would determine the volume of bank demand deposits through regulating the amount of currency outstanding, would thus assume more drastic credit control powers than are enjoyed by any authority in a democratic country. The Currency Commission, under Professor Fisher's plan, would then be given the expressed functions of stabilizing the commodity price level and

ironing out the business cycle, through use of its power to determine the volume of existing bank deposits.

Proponents of the "100 Per Cent Reserve Plan" are firm believers in the theory that the volume of bank deposits largely determines the level of commodity prices and business activity. Hence, they conclude that once the total of bank deposits outstanding is subjected to centralized Government control, it can be varied in the interests of price and business stability.

Under Professor Fisher's plan, the amount of demand deposits would equal the volume of currency held by the Commission less the amount of paper money in actual circulation. If depositors in a Checking Bank were to withdraw their deposits in cash, it is assumed that these funds would be redeposited in the banks within short order. If redeposited in a Loan Bank or Department, the latter would invest or lend them to a borrower who would then deposit the funds in a Checking Bank to make them available for ready use. The banks would thus be unable to influence the volume of deposits. On the other hand, when the Currency Commission wished to expand the amount of outstanding deposits, it would do so by purchasing Government and other bonds from the banks and others, paying for them with new paper money. When this paper money was finally deposited with Checking Banks, a corresponding expansion of the volume of demand deposits would result. If the Currency Commission wished to contract the volume of currency in circulation, it could do so through sale of bonds to the banks and others.

The functions of the Currency Commission, in the proposals advanced by the University of Chicago group of advocates of the "100 Per Cent Reserve Plan," would be assumed by the Federal Reserve banks. Since, however, the Reserve banks would first be acquired by the Federal Government, which would transform them into a National Monetary Authority, the practical effect is the same under either plan.

The above summary is not presented as a complete picture of the 100 per cent reserve proposal. Such a picture is impossible, for the simple reason that advocates of this plan are far from agreement among themselves as to the major features, let alone the details, of what they propose to do.

Defects in the "Plan." All the available evidence indicates that the "100 Per Cent Reserve Plan" cannot achieve the aim claimed by its advocates. In the first place, commodity prices and business

activity are profoundly affected by a number of non-monetary factors, such as the volume of production in relation to consumption, wage rates and other costs, taxes, conditions in foreign markets, the political situation at home and abroad, and so forth. During the decade of the 1920's, for example, the volume of bank deposits expanded steadily, but commodity prices remained relatively stable.

The Board of Governors of the Federal Reserve System, in a statement opposing the enactment of bills that would require it to make the stabilization of the price level a primary objective in the formulation of its credit policies, described the impossibility of regulating the price level through monetary measures as follows:

There have been times when the amount of money and prices have changed together; but usually they have not. When they have moved together this may have been due to the fact that it takes more money to do the same amount of business when prices are high than when they are low.

Whether prices and the volume of money do or do not move together depends on many other conditions, such as weather and the size of harvests, inventions, foreign trade, Government spending, taxes, wages, and the general attitude of business. When people are venturesome and expect good times, they lay in supplies and this tends to raise prices. When people are discouraged and expect things to go badly, they tighten their belts and buy as little as possible. The demand for goods declines and prices fall. Usually other things have a greater influence on prices than has the amount of money. . . .

The Board of Governors is in complete sympathy with the real purpose of the price-stabilizing bills, which is to prevent booms and depressions and have business always on an even keel. But experience has shown that prices do not depend primarily on the volume or the cost of money; that the Board's control over the volume of money is not and cannot be made complete; and that steady average prices, even if obtainable by official action, would not assure lasting prosperity.

Effects of the introduction of the "100 Per Cent Reserve Plan."
The establishment of a 100 per cent reserve requirement for demand deposits of banks would effect a complete revolution in the conduct of banking. The American public, accustomed to obtain a variety of services from the thousands of banks now in operation, would have to resign itself to far-reaching changes in the volume and nature of these services.

The "Plan" would also precipitate profound changes in many other phases of the nation's economic system. The lending powers of the banks would be severely restricted, and many banks would probably be forced out of business. Since the banks would have to hold demand deposits in the form of cash or the equivalent, they would no longer be in position to render, free of charge, the many

valuable services which the American public in general and American business in particular now take for granted as typical of present-day banking. The highly efficient and convenient checking service in particular would be jeopardized, and would have to be replaced to a considerable extent by a return to the use of currency.

Many of the broad economic consequences of the establishment of the "100 Per Cent Plan" would be particularly unfortunate. The agency that would be responsible for the administration of the plan would be given the task of adjusting the volume of currency and bank deposits outstanding to stabilize commodity prices and business. In doing this, it would at times be called upon to issue large additional amounts of paper money, which would undermine confidence in the national monetary system. At other times, it would have to ration credit and withhold it from many prospective borrowers to prevent an expansion in the volume of deposits when prices were rising or business was good. A politically appointed body vested with these grave responsibilities would be subjected to pressure to provide for the expansion of the currency, involving the danger of runaway paper money inflation.

Credit Control in Wartime. Under the impact of the war managed currency was broadened into managed economy. The demand of the armed forces and the Allies became so great that raw materials and manpower had to be allocated by the Government. In fact, governmental agencies were established to plan the entire output of the country. Since the demand for commodities in many instances exceeded the supply, rationing of basic commodities was instituted, while certain types of goods were withheld entirely from civilian users. In order to prevent a too rapid rise in prices and wages, ceilings were imposed on both.

Modern wars are very expensive and huge sums had to be raised by the Government. Taxes were increased to levels unprecedented in American history. Still the revenues obtained by the Government from this source amounted to only 41 per cent of total expenditures. The Treasury, therefore, had to cover the huge deficits with loans. The methods adopted by the Treasury had the following objectives: (1) to raise as much money as was necessary at the lowest possible rates (in part, this was achieved by increasing materially the floating debt through the sale of Treasury bills and certificates of indebtedness. The rate on the former was pegged at $\frac{3}{8}$ of 1 per cent, while the rate on the latter was constantly maintained at $\frac{7}{8}$ of 1 per cent.); (2) to syphon off excess purchasing

power of the people by inducing them to invest their savings in Government obligations. However, in spite of the serious efforts made by the Treasury to distribute its securities among ultimate investors, it was not wholly successful and large amounts of Government obligations were absorbed by the commercial banks, resulting in new deposits, i.e., new purchasing power.

With the end of hostilities the rigid controls imposed on production, distribution, prices, and wages were gradually relaxed. It is, however, evident that a considerable period of time will have to elapse before all the war controls can be lifted.

This does not mean that managed currency as described before will come to an end. On the contrary, plans are being made and bills have been introduced in Congress to increase the power of the Government over the economic activities of the country in peacetime.

Questions for Study and Review

1. What are the powers over the money market held by:
 - (a) The Government?
 - (b) The Board of Governors of the Federal Reserve System?
2. What is meant by the term "managed currency"?
3. Discuss the various instruments of managed currency in the United States Which of these instruments are adapted to qualitative credit control?
4. State the main provisions of the "100 Per Cent Reserve Plan"
5. What benefits are claimed by the advocates of the "Plan"?
6. Criticize the "Plan":
 - (a) As to the objectives;
 - (b) As to the effects.

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CHAPTER 21

Money, Credit, and Prices

Scope of chapter. The meaning of money and the types of money in circulation in the United States have been fully described in earlier chapters. The purpose of this chapter is to discuss the relationship between money and credit, on the one hand, and prices, on the other.

Perhaps at no time has this question been the subject of so much controversy as in recent years, particularly prior to the outbreak of World War II. The devaluation of the dollar by the United States was based on the assumption that the reduction of the gold content of the dollar would result in higher commodity prices. In other words, the Roosevelt Administration endeavored to bring about an increase in prices through monetary means. Not only in the United States, however, has currency devaluation aroused much interest; in other countries, too, the relationship between prices and the value of money in terms of gold has been the subject of study, discussion, and legislation. Similarly, the large spending program of the Federal Government and the sharp increase in the volume of deposits caused by the sale of bonds to the banks were intended to influence commodity prices. This chapter will endeavor to analyze the relationship of money and credit to prices.

Use of money. The use of money is not uniform in the various countries of the world. Wherever the checking system is not generally in use, there is a relatively large amount of currency (notes issued by central banks or Treasury) in circulation. In the Anglo-Saxon countries, notably in the United States and Great Britain, currency is used only as the small change of the nation, whereas the bulk of the transactions involving an amount of over ten or twenty

dollars is, as a rule, settled by credit or deposit currency (checks). The minor rôle played by money in the United States and Great Britain may be seen from the table below, which shows the amount of money in circulation and the total volume of bank deposits.

MONEY IN CIRCULATION AND BANK DEPOSITS

Year	UNITED STATES (Millions of dollars)		GREAT BRITAIN (Millions of pounds)	
	<i>Money in Circulation*</i> (End of year)	<i>Deposits of All Banks**</i> (End of year)	<i>Notes in Circulation*** (Average of weekly figures)</i>	<i>Deposits of London Clear- ing Banks (Monthly average)</i>
1930 . . .	4,603	53,039	358 6	1,801
1933	5,519	38,505	371 2	1,953
1939	7,598	58,344	507 3	2,248
1940	8,732	65,021	574 7	2,506
1941 .	11,160	70,792	652 2	2,970
1942	15,410	88,478	808 3	3,275
1943	20,449	106,649	966 3	3,677
1944 .	25,307	129,204	1,135 7	4,153

* Money outside the Treasury and Federal Reserve banks. The amount of money actually in the hands of the public is smaller, for part of it is kept in the tills of the banks.

** Exclusive of interbank deposits.

*** Of the total amount of notes in circulation, an amount equivalent to about 6 per cent of the deposit liabilities of the banks (or roughly between 20 and 25 per cent of notes in circulation) is kept in the vaults of the banks and therefore is not in actual circulation.

Actual currency in these two countries is normally used for the following purposes: (1) retail trade, (2) wage payments, (3) tourist and seasonal expenditures. The volume of currency in circulation expands and contracts in accordance with changing conditions in these three branches of economic activity. Thus, for example, before the Christmas holidays a marked increase in the volume of currency in circulation is always found in the United States; similarly, in a period of rising prices and of increased employment, the volume of currency in circulation increases, as it does also in the summer months when the tourist season is at its height. During the war other factors such as hoarding, black-market operations, and tax avoidance contributed to the sharp increase in the volume of currency in circulation.

Money and member bank balances. The question is often asked: How do banks obtain money when there is an increased demand for currency, and what do banks do with the cash when it returns from circulation? As a rule, banks do not keep more money in their tills than is actually needed for everyday, normal

business requirements. When there is an increased demand for money, the banks obtain it from the Federal Reserve banks and pay for it by having the accounts which they maintain with the Reserve banks debited. Hence an increase in the volume of currency in circulation almost invariably results in a decrease in the volume of member bank balances with the Reserve banks, unless this movement is counteracted by open market operations of the Federal Reserve banks or by other transactions that increase member bank balances with the Reserve banks. Vice versa, a return of currency from circulation is used by the banks to bolster up their reserve balances with the Federal Reserve banks.

Once this point is clear, it is possible to analyze the effects which the issue of paper money put out by the government to meet its own needs would have on banks throughout the country and on their ability to create deposits either through the granting of loans or through the purchase of securities.

If, for example, the United States Congress were to pass a law ordering the Treasury to issue \$2,000,000,000 of unsecured paper money or money secured either by government securities or by the free silver held by the Treasury, this action would have the following effect. The volume of currency in circulation would temporarily increase. But sooner or later, because the greater part of this currency would find its way into the banks, the result would be an increase in the volume of deposits of the commercial banks. Since the banks turn over to the Federal Reserve banks the currency which they do not need, this would cause an increase in the volume of member bank balances with the Reserve banks. However, since one dollar of deposits that the member banks have with the Reserve banks can theoretically support a deposit liability of about five dollars,¹ it follows that the issue of paper money by the United States Government results in a corresponding increase in the volume of member bank balances, which in turn could be used by the banks for the granting of loans or the purchase of securities, and thereby create an expansion of deposits.

This conclusion, of course, is predicated on the assumption that the Board of Governors of the Federal Reserve System would not exercise its prerogative of changing reserve requirements (which it can do under the Banking Act of 1935) and that the reserve requirements had not been raised to this legal limit, or that the Federal Open Market Committee would not decide to order the Reserve

¹ Estimate based on the highest reserve requirements, permitted by law.

banks to sell government securities. The full effect of the increase in the volume of currency by action of the Federal Government, disregarding the psychological element, would be felt, therefore, through the increase in the volume of deposits created by the banks.

Limitation on the issue of paper money. In most countries of the world, including the United States, laws have been passed limiting the issuance of money.² In the United States, for example, the amount of Federal Reserve notes, the most important single type of currency in circulation, is limited by the amount of gold certificates held by the Federal Reserve banks. Under the present law, Federal Reserve banks must maintain 25 per cent in gold certificates against Federal Reserve notes in circulation. Therefore, if the volume of Federal Reserve notes in circulation should rise and the ratio to gold certificates should fall below the 25 per cent required by law, the Federal Reserve banks could not issue any more Federal Reserve notes. This restriction is of theoretical importance only, however, since the United States has, in addition to Federal Reserve notes, silver certificates that could be increased regardless of the amount of gold certificates held by the Federal Reserve banks. In any event, since the actual amount of currency in circulation in the United States is relatively small and an increase would affect primarily the balances of the member banks with the Federal Reserve banks, the movement of prices in the United States, if they are at all affected by the issuance of money by the Federal Government, would be influenced primarily through the increase or decrease in the volume of bank credit. It is, therefore, necessary first to analyze the position of bank deposits or bank credit, and then to ascertain its relationship to the price level.

Deposits. Bank deposits, with the exception of those resulting from the issuance of paper money by the government, are created by the banks in the following ways.

(1) *Loans.* Whenever a bank makes a loan, irrespective of the purpose, it causes an increase in deposits; and, vice versa, the repayment of a loan causes a reduction in the volume of bank deposits.

(2) *Investments by banks.* The purchase of securities by banks from sellers other than banks, irrespective of the type of security, causes an increase in the volume of deposits. This effect is due to

²During the war these restrictions were lifted in most countries while in the USA the gold certificate reserve against Federal Reserve notes was lowered from 40 per cent to 25 per cent.

the fact that when banks buy securities, they pay for them with checks drawn on themselves, which action in turn results in an increase in deposits. The following example will illustrate this point.

Assume that Bank A has purchased from X \$10,000 of government securities. The bank pays X by giving him an officer's check drawn on itself. X deposits this check with his bank, and thus creates a deposit there. Hence, whenever banks increase their holdings of securities, the result invariably is an increase in the volume of deposits.

As a matter of fact, the great increase in the volume of bank deposits in the United States during the war years was due almost exclusively to the purchase of government securities by the banks. The deficit of the United States Government which necessitated the sale of obligations was responsible for the great increase in the volume of deposits that took place during those years. Ordinarily an increase in deposits resulting from loans or investments made by the banks tends to press on the balances of the member banks with the Reserve banks, since the banks are under obligation to maintain a fixed ratio of reserves against their deposits. But this was of little importance during 1934-1936, because of excess reserves. During World War II the necessary reserves were supplied through open market operations of the Reserve banks.

There are, however, transactions that not merely cause an increase in the volume of bank deposits but also, at the same time, bring about an increase in the reserve balances of the member banks with the Reserve banks. These factors are (a) an inflow of gold from abroad, or sales to the Treasury of domestic, newly mined gold and of gold from the arts and industry; (b) a return flow of currency from circulation; and (c) the purchase of securities by the Federal Reserve banks in the open market.

An influx of gold into the United States can best be understood by tracing through such a transaction. Assume that the Swiss franc has gone below the gold export point. This means that those wishing to transfer funds to the United States will find it cheaper to do so through the shipment of actual gold. Similarly, American banks may also find it profitable to exchange their franc balances for gold and have it shipped to the United States. In both cases, upon the arrival of the gold in the United States, it is sold to the Treasury, which pays for it with a check drawn on itself. The

Swiss bank will deposit this check with an American bank, thereby creating deposits. The American bank, in turn, will deposit the check with the Federal Reserve bank, thereby increasing its balance with the Federal Reserve bank. If the gold imports are made by the American bank, the sole result will be an increase in its reserve balance. Thus an inflow of gold may create deposits while at the same time it creates member bank balances with the Reserve banks.

A similar situation is brought about by a return flow of currency from circulation. Let us assume that merchants have, after the Christmas holidays, accumulated currency in their tills. They will take this money and deposit it with their banks, thereby increasing deposits. The banks, then, will turn over the currency to the Federal Reserve bank, thereby creating reserve balances. Similarly, when the Federal Reserve banks buy government securities and acceptances from the public, they pay in checks drawn on themselves. These checks are deposited with the banks and become deposits. The banks, in turn, by depositing the checks with the Federal Reserve banks, obtain reserve balances.

Of the various factors that create deposits, only two—deposits created by loans, and those created by investments made by the banks—fail to increase reserves of the commercial banks. On the other hand, deposits arising from an influx of gold, from a return flow of currency, from the sale of domestic gold by the public to the Treasury, and from security purchases by the Federal Reserve banks from the public in the open market not only create deposits but also increase member bank balances with the Reserve banks.

An increase both in commercial bank deposits and in member bank reserves takes place when the Treasury spends the gold profit derived from the devaluation of the dollar. The actual details are as follows: First the Treasury prints gold certificates which are turned over to the Reserve banks, thereby increasing Treasury balances. As the Treasury spends these balances, they find their way into the member banks, thereby creating individual deposits. The banks, in turn, deposit with the Reserve banks the checks drawn by the Treasury on itself or the Reserve banks, thereby increasing member bank reserves. The same result is achieved when the government issues silver certificates.

The fact that certain transactions cause an increase not only in deposits but also in member bank reserve balances is of considerable

importance, and explains why, in spite of the sharp increase in the volume of deposits during the period 1934-1939, interest rates continued to remain exceptionally low. This result was due to the fact that deposits were created, not merely by the buying of government securities by the banks, but also because of the influx of gold into the United States and the spending of a part of the dollar devaluation profit through issuance of gold certificates by the Treasury, thereby making it possible for the member banks to increase their deposits without borrowing from the Reserve banks.

Prices. Since we have analyzed the factors that cause an increase or decrease in the volume of money and of deposits, it is now possible to turn to the question of the relation between money, credit, and prices. From the foregoing discussion it is clear that, if prices are affected by monetary policies, the influence will be felt through the movement of deposits and not through currency (actual money), which in the United States plays only a minor rôle. Commodity prices depend essentially upon the conditions of demand and supply. This principle has been so well established that it needs no further discussion or elaboration. Since, however, the volume of deposits coupled with the amount of money in circulation represents the purchasing power (the demand side), it is argued that, if the volume of commodities available for sale (the supply side) remains unchanged while the volume of money and particularly of deposits increases, the result would be an increase in the prices of commodities. (In its more familiar form, this is known as the *quantity theory of money*.)

In addition to the amount of currency and bank deposits, the velocity of the media of exchange must be taken into consideration. It is clear that, if the velocity of currency in circulation or of bank deposits increases, the same amount of money and credit can support a greater number of transactions. Velocity, or the turnover of deposits and currency, is therefore equal in importance to the amount of media of exchange available.

Therefore, the theory previously mentioned also maintains that, if the volume of commodities and the media of exchange remain unchanged, while the velocity increases, there will be an increase in prices. This theory is more fully discussed below.

Quantity theory of money. The quantity theory of money uses a mathematical equation to express the relationships that exist among the various factors which affect the general price level. The equation is derived as follows:

Let	M = number of units of money in circulation
	V = velocity of M (the number of times the average monetary unit changes hands within a given period of time, for example, one year)
	M' = number of units of credit in use
	V' = velocity of M'
Then	$MV + M'V'$ = total monetary volume of trade, wage payments, and other transactions in which money or credit is used as a medium of exchange
Now let	T = total number of units of goods, wages, etc., which are exchanged with money or credit as the medium (the physical or numerical volume of transactions)
	P = average price per unit of all such transactions
Then	PT = total monetary volume of trade, wage payments, and other transactions in which money or credit is used as a medium of exchange
	Note that $MV + M'V'$ and PT are equal to the same thing and are, therefore, equal to each other.
Thus	$PT = MV + M'V'$
	$P = \frac{MV + M'V'}{T}$

From the above equation, it is obvious that, *other things remaining unchanged*, the level of prices, P , will vary: (1) directly with $MV + M'V'$, and (2) inversely with T . An increase in the supply of money, M , or credit, M' , in use, or an increase in the velocity of either, will cause a rise in general prices, P , provided all of the other factors remain unchanged. Also, an increase in the physical or numerical volume of transactions, T , will cause a fall in general prices, provided the other factors remain unchanged.

The above equation is a mathematical truism. It is helpful in understanding the relationships among the various factors involved. Unfortunately, it is too often accepted as an adequate, or even the sole, explanation of these relationships.

The qualifying clause, "other things remaining unchanged," which is of the utmost importance, is too frequently ignored. In actual experience, the "other things" are almost certain not to remain unchanged. All of the factors in the equation are in continuous flux. An increase in the supply of money may or may not be followed by an increase in the supply of credit, and, if so, there may be a long or short lag; it may or may not be accompanied or followed by an increase or decrease in velocity. If a rise in prices occurs, it may or may not cause or be followed by an increase in the physical volume of trade, in hours of employment, in units of security sales, and so on.

Since changes in any one factor may induce, or at least be accompanied or followed by, changes in one or more other factors, any attempt to predict an exact quantitative effect from a given change in one or more factors is extremely hazardous. It is enough to say, for example, that an increase in the supply of money or credit, or in their velocity, will *tend* to cause a rise in prices, but that this *tendency* may be partially offset, counterbalanced, or more than offset by changes in other factors.

Those who attempt to apply the quantity theory in practice sometimes make the mistake of assuming that T in the equation represents only the sales of commodities and that P refers only to the prices of commodities. They then proceed to the conclusion that an increase in the supply of money and credit, accompanied by the same or a higher velocity, will inevitably cause a rise in commodity prices. They forget that money and credit are also used to pay for services (as wages, salaries, and professional fees), for land and buildings, for rentals, for securities—in fact, for all the things which men buy and sell. They do not always realize that the entire increased employment of money and credit may be in transactions which do not at all involve an exchange of goods, and that, consequently, the price level of commodities may remain unchanged or may even decline.

The above principle was illustrated during the period 1927-1929, when the volume of bank deposits and their velocity increased sharply because of the rapid rise in the volume of brokers' loans, but prices, except those of equities, remained practically unchanged. The increase in the volume of deposits, coupled with the very sharp increase in the velocity of deposits which occurred during the period, might have been expected to result in a corresponding rise in commodity prices. As a matter of fact, however, prices of commodities remained stable.

Similarly, during 1934-1939, while the volume of deposits was rising sharply because of the huge purchase of government securities by the banks and the influx of gold, commodity prices did not move accordingly. The increase in prices of commodities that took place during the period 1934-1936 was due, rather, to the drought and to measures adopted by the Roosevelt Administration. This fact is best evidenced by a comparison study of the price movement of various types of commodities during this period, as shown in the table on the following page.

COMMODITY WHOLESALE PRICE INDEX

(1926 = 100)

	<i>Farm Products</i>	<i>Foods</i>	<i>Other Commodities</i>
December, 1933 . . .	56	63	78
" 1935 . . .	78	86	79
" 1936 . . .	89	86	82
" 1937 . . .	73	80	84
" 1938 . . .	68	73	80
" 1939 . . .	68	72	84

On the other hand, the large volume of deposits undoubtedly had its effect on equities, while the large excess reserve balances and resultant low interest rates caused a sharp increase in prices of gilt-edge bonds.

Regulation of prices through the manipulation of credit. There has developed a belief that the commodity price level can be controlled through the manipulation of credit. The notion still persists that in a period of declining prices, if the volume of credit were to be increased materially, it not merely would stop the decline of prices but also would bring about a reversal in the trend. Based on this theory, the demand has been made that the central banks regulate the volume of credit in such a manner as to maintain the stability of the price level. It is highly doubtful whether central banks are in a position to regulate the volume of credit and currency in such a manner as to influence the level of prices, because, as indicated before, the prices of individual commodities are the result of a number of miscellaneous factors that affect each commodity but not other commodities.

Yet, in spite of the severe criticism to which the practical conclusions drawn from the quantity theory of money have been subjected, several attempts have been made during the past decade to control prices through credit management. For example, in the United States the Federal Reserve banks early in 1932 engaged in large open market operations with a view to causing an increase in member bank balances with the Reserve banks and, through this, inducing banks to increase the volume of their loans. In 1933 this experiment was repeated until the volume of surplus balances of the member banks with the Reserve banks was very large. The theory in back of these open market operations was that an increase in surplus balances with the consequent reduction in interest rates would, on the one hand, induce the banks to adopt a more liberal credit policy and would, on the other hand, induce

industrialists and merchants to borrow more freely. But commercial loans did not increase; on the contrary, they decreased.

Experience during World War II has shown that price control in periods of war, when the expenditures of the government are very large and when a considerable portion of the productive capacity of the country is devoted to the war effort, can be effectively exercised only by the adoption of direct measures such as rationing, price and wage ceilings, and allocation of materials, manpower, and transportation. Credit measures alone could have very little, if any, influence on the movement of commodity prices when a huge amount of purchasing power at the disposal of the people coincides with a great scarcity of commodities.

Gold and commodity prices. It has often been stated that a change in the gold content of the currency will affect commodity prices. The United States, on the basis of this theory, abandoned the gold standard early in 1933, and later reduced the gold content of the dollar. The idea that there is a definite relationship between prices of commodities and the gold content of the currency is, briefly stated, as follows.

So long as a currency is on the gold standard, prices expressed in terms of the currency are actually expressed in terms of gold. If, therefore, the value of gold expressed in terms of paper currency should be increased, prices of commodities in terms of paper money would show a corresponding rise. If, for example, one bushel of wheat in the United States sells for one dollar under a fixed gold standard, the wheat is worth one gold dollar or 0.04838 ounces of fine gold (at the old parity). If, however, the price of gold is doubled—that is, 0.04838 ounces of fine gold exchange for two dollars—then a bushel of wheat on the basis of this theory ought to sell for two dollars. The devaluation of the dollar in the United States was thus based on the belief that it would raise prices, speed up business recovery, and, above all, help the debtor class.

An analysis of this theory, however, will show that such is not the case. A mere devaluation of the currency does not in itself increase the purchasing power of the people. Devaluation alone—disregarding the temporary element of speculation, which usually follows such an act—does not increase the demand for commodities, nor does it tend to decrease their supply. The act of devaluation by the United States Government did not effect an increase in salaries and wages. The only people who profited were the owners of gold mines and those having funds abroad. Theoreti-

cally, in a country whose foreign trade is small and where the quantity of commodities imported and exported plays only a minor rôle in the national economy, the devaluation of the currency would hardly, if at all, affect the price level. This theoretical case may be applied to the United States, because this country is less dependent on foreign trade than is any other large industrial nation.

On the other hand, it cannot be denied that the devaluation of the currency of one country alone, all others remaining at their old parity, would affect prices of commodities imported from abroad. For example, if France were to devalue the franc from 50 francs per dollar to 100 francs per dollar, it is obvious that a French importer would have to pay in the United States twice as much for cotton in terms of francs as he did prior to the devaluation. Similarly, commodities internationally traded in would be affected by the devaluation of the currency. If, for example, Australia were to devalue its currency by 50 per cent, it is not unlikely that the price of Australian wheat, which is determined to a large extent in the Liverpool market, would rise correspondingly in terms of Australian money.

COMMODITY PRICES IN GREAT BRITAIN, 1930-1935

	<i>Wholesale Commodity Price Index (Economist, 1913 = 100)</i>	<i>Cost of Living Index (Ministry of Labor July, 1914 = 100)</i>
1930.....	106.8	157.8
1931*.....	89.3	147.5
1932.....	86.1	143.6
1933.....	86.9	139.7
1934.....	90.3	141.2
1935.....	94.3	142.7

* Gold standard abandoned.

On the other hand, when a group of countries devalue their currencies at the same time and by about the same percentages, the effect of this devaluation on commodities, even those entering into the foreign trade of the respective countries, is negligible. This fact was proved in 1931, when the abandonment of the gold standard by Great Britain and the depreciation of the pound sterling were accompanied by similar acts on the part of other countries with which Great Britain transacts the greater part of its foreign trade.

That currency depreciation alone need not affect commodity prices, as is generally believed, can be seen from the table above,

which shows prices in Great Britain prior to and after the depreciation of its currency.

The relatively small increase in prices that did take place was occasioned chiefly by the increased demand caused by improved business conditions. The price level in the United States is not a good example of the effects of currency depreciation, for in this country, the measures taken by the Federal Government, as well as the huge spending program of the administration, had in all probability a greater influence on commodity prices than did the devaluation of the dollar.

Regulation of prices through changes in the gold content of the dollar. The possibility of controlling the price level through changes in the gold content of the dollar has been before the public for some time. Professor Irving Fisher has for long advocated the idea that prices could be controlled through changes in the gold content of the dollar by adopting the so-called "compensated dollar."

Briefly stated, this theory is as follows: If prices tend to rise, this tendency can be counteracted by increasing the gold content of the dollar; on the other hand, if prices tend to decline, a lowering in the gold content of the dollar would bring the downward movement to an end. As indicated before, the effects of the devaluation of the currency on commodity prices, particularly in a country whose national economy does not depend to any large extent upon foreign trade, are relatively small. An increase or decrease in the gold content of the dollar would not increase or decrease the purchasing power of the people. It might, of course, influence the prices of certain commodities internationally traded.

Aside from this, the adoption of the compensated dollar would cause a great deal of political friction. The aim of the compensated dollar would be to stabilize an index number of wholesale prices. As is well known, however, the index number is based on a large number of individual commodities. For example, if there is a drought in the wheat regions, prices of wheat will rise, but if, at the same time, there should be an abundant cotton crop, cotton prices would fall. The decline in the price of cotton then might be exactly offset by the rise in the price of wheat, and the index number would remain stable. However, cotton farmers, being confronted with the decline in the price of their commodity, would demand that the gold content of the dollar be lowered in order to

raise the price of their commodity. On the other hand, millers and consumers of wheat might argue that a rise in the price of wheat would necessitate an increase in the gold content of the dollar, in order to bring the price of wheat back to its old level.

The theory of changing the gold content of the currency in order to manipulate the price level has become during the past decade more commonly known as "management of the currency." It has often been stated that the economic recovery of some of the countries of the sterling bloc was due to the fact that they had adopted a managed currency. However, a careful analysis of the situation of the various countries proves that this is not the case.

For example, Sweden, which is usually pointed out as an example of a country which has made remarkable economic recovery through the adoption of a managed currency system, has maintained the krona pegged to the pound sterling, and throughout the three years 1934-1936 the krona varied only slightly in its relation to the pound sterling. Since the pound is the most important currency so far as Sweden is concerned, it is obviously incorrect to state that Sweden has adopted a managed currency system. On the other hand, it is true that Sweden, as well as the United States, has for some time had a managed credit system in which the central banks in each country have at times endeavored through open market operations to counteract the outflow of gold. During World War II, when commodity prices rose sharply, no country decreased the price of gold in order to check the upward price movement. With the exception of the United States for a short period in 1933, no country has, thus far, applied practically the theory that commodity prices can be influenced immediately through the variation in the gold content of the currency.

Inflation and commodity prices. Under ordinary circumstances an increase in the volume and/or velocity of credit or of currency in circulation is not likely to affect materially the prices of commodities. When, however, the currency or the credit structure of a country is abused, confidence in the financial stability of the country is undermined, and this situation leads to a scramble for commodities and equities in exchange for bank deposits, with the unavoidable result of rapidly rising prices. Whenever the supply and/or velocity of currency and credit increase at a much greater rate than the supply of commodities, the resulting condition is called "inflation."

A study of inflation may be divided into discussions of currency inflation and credit inflation, together with their effects on commodity and security prices.

Currency inflation. Currency inflation took place in most European countries during and shortly after World War I. The most notorious cases were those of Germany and Russia, where the volume of money in circulation increased so rapidly that it practically lost its value. Currency inflation usually occurs in periods of great economic and political stress, and usually follows some such major catastrophe as a war or revolution. In the past, currency inflation took place primarily in countries where the checking system was not well developed and where currency formed the principal medium of exchange. The same phenomenon was witnessed in a number of belligerent countries during World War II, notably in Greece and in China.

The process of currency inflation may briefly be described as follows: The government, not having sufficient revenues with which to pay its expenses, has recourse to borrowing from the central bank. This borrowing usually takes the form of printing treasury bills or government bonds which are discounted with the central bank in return for currency. The amount of currency in circulation under these circumstances, therefore, is determined not by the requirements of business but rather by the needs of the government. As the volume of currency in circulation increases, the people hold increasing amounts of it until they begin to realize that the government is financing itself through the aid of the printing press. Then they lose confidence in the currency, with the result that a flight from the currency ensues, into commodities, equities, or real estate, or into all three. Hence the increase in the volume of currency is accompanied by a sharp increase in currency velocity.

If the country were on the gold standard or on the gold exchange standard and its currency fixed in relation to other currencies, prices could not rise materially because, as soon as they had gone above the world price level, an influx of commodities from abroad would take place. This, in turn, would tend not merely to check a further rise in prices at home but also to diminish industrial activity, thereby creating unemployment and reducing the demand for commodities. In addition, the payment for imports would reduce the gold and foreign exchange holdings of the central bank, and thus **force a contraction of the currency.** This, of course, does not apply

in wartime, when the shortage of commodities and of shipping facilities leads to a contraction of imports.

However, history shows that governments have usually resorted to the issuance of paper money on a large scale when their currencies were off the gold standard and fluctuating in the world's markets. The larger the issue of paper money by a government, the greater will be the lack of confidence in the currency and the tendency of the people to exchange their own paper money into foreign currencies—a tendency that further depresses the value of the local currencies in terms of gold or in terms of the other exchanges. Currency inflation is therefore, as a rule, accompanied by exchange depreciation, and both together exercise their influence on the price level.

Once a government begins to resort on a large scale to the printing press, and its exchange becomes subject to fluctuation, that country finds itself in a vicious circle which may be described as follows: The increase in the volume of paper money is accompanied by a decline in the external value of the currency and by a rise in prices. The greater the rise in prices, the greater will be the expenditures of the government; but the larger the expenditures, the greater the deficit. In cases where extreme currency inflation took place, as in a number of continental European countries shortly after the two World Wars, the increase in the volume of currency in circulation was usually accompanied by an increase in velocity and by a corresponding rise in prices of commodities and equities.

Credit inflation. In contrast to currency inflation, which takes place only after a great catastrophe, credit inflation is a common occurrence. Credit inflation differs from currency inflation in that it is not the volume of currency but rather the volume of bank deposits which increases. Credit inflation may take place either because the government is paying mounting deficits by borrowing from the banks, or because of an increase in the volume and velocity of deposits for speculative purposes.

In the United States, within the past three decades credit inflation has several times developed as a result of the needs of the Federal Government: (1) during and shortly after World War I; (2) after 1932, when the deficit of the government resulted in a large increase in the volume of deposits; and (3) during World War II, when the deficits of the Government reached staggering amounts. The credit inflation which took place during the 1927-1929 period was caused by the great increase in brokers' loans.

A comparison of the various periods of credit inflation (that during and shortly after World War I and II, that during 1927-1929, and that after 1932) shows certain similarities and certain differences. During World War I, the inflation was marked by an increase in prices of commodities, equities, and real estate. The inflation of 1927-1929 was marked by a sharp rise in security prices while the prices of commodities and of real estate remained practically stable. The credit inflation that followed 1932 was marked by a substantial rise in security prices, by a much smaller rise in prices of commodities, and by abnormally low rates of interest. During World War II the Government endeavored to prevent price rises by the introduction of rationing of commodities and imposition of price and wage ceilings. Prices of equities were kept down by high corporate taxes.

The reason for the sharp rise in commodity prices during 1917-1920 was that the demand for commodities at home and abroad as a result of the war was very large. Unemployment was practically unknown, money wages were high, and therefore the ability of the people to buy was great. Hence, the rise in prices, while partly the result of the credit inflation, was caused to a very considerable extent by the actual demand for commodities for war purposes and partly by the decreased production of ordinary consumption goods in the belligerent countries.

During 1927-1929, on the other hand, the demand for credit came exclusively from the buyers of securities. Consequently the large volume of deposits which was created because of the increase in brokers' loans had but little effect on commodity and real estate prices. While it cannot be denied that the increase in industrial activity caused by the new deposits, which were used partly for the purchase of new corporate securities, generated consumer purchasing power, yet its influence on commodity prices was only negative: it tended to prevent prices of commodities from declining. The period of 1927-1929 offered a good opportunity to test the quantity theory, for not only did the volume of deposits rise but also their velocity increased very sharply. Yet prices of commodities remained practically stable. The newly created purchasing power was effective only in the stock market and in real estate.

The credit inflation following 1932 was, as stated before, caused primarily by the requirements of the Federal Government, which through the sale of bonds to the banks created a large volume of deposits. This increase in the volume of deposits was not accom-

panied by a corresponding increase in commodity prices, even though it also coincided with the depreciation of the dollar. The rise in prices that did take place was caused primarily by the drought and by measures undertaken by the Administration. The increase in commodity prices during World War II was much less pronounced than during and shortly after the last war. The rise in prices was due partly to the large increase in the amount of purchasing power in the hands of the people, and partly to the reduction in the supply of commodities available for consumption.

The movement of commodity prices during the inflationary periods, 1917-1920, 1927-1929, after 1932, and during World War II, clearly indicates that commodity prices are determined by demand and supply, while the amount of credit outstanding or the velocity of the credit may contribute little to the price movement, except where the vicious circle of inflation is already in existence.

A further analysis of the four inflationary periods in the United States during the past three decades reveals additional differences, particularly in regard to interest rates. During the inflationary period 1917-1920, as well as during the period 1927-1929, the increase in the volume of credit was accompanied by a sharp rise in interest rates. This effect was natural, for the increase in the volume of deposits made it necessary for the banks to maintain larger reserves with the Reserve banks. However, the Reserve bank authorities, in order to curb speculation, sold government securities previously acquired by the Reserve banks, and this action reduced the reserve balances of the member banks. But, in order to keep the balances at the ratio required by law, the member banks were forced to borrow from the Reserve banks, which action, in turn, tended to cause a rise in interest rates, particularly after the Reserve banks raised their discount rates.

During the period that followed 1932, and during World War II, however, in spite of the tremendous increase in the volume of deposits, interest rates not only remained low but tended to decline. This result was due to the fact that member banks were in a position to build up huge excess reserve balances, brought about by the inflow of gold and by the operations of the Treasury, which, through the utilization of part of the profit obtained from the devaluation of the dollar and through the issuance of silver certificates, was in a position to raise reserve balances. The large purchases of government securities by the Reserve banks during 1932-1933 also contributed to the growth of the excess reserves, as did

the return flow of hoarded money. Furthermore, since the increase in deposits was chiefly the result of the sale of government securities to the banks, and since the government was confronted with a large deficit, it was to its advantage to maintain low rates of interest. Hence, in spite of the fact that member banks had dangerously huge balances with the Reserve banks, the latter did not sell even part of their government securities. During World War II the open market purchases by the reserve banks provided the member banks with the necessary reserves and thus kept member bank borrowing from Reserve banks at a very low level.

Questions for Study and Review

1. Compare the relative importance of money and deposit currency in the United States, in Great Britain, and in continental Europe.
2. Explain how an issuance of government paper money will affect (a) the deposits; (b) the reserve position of commercial banks.
3. How will each of the following factors affect (a) the deposits and (b) the reserve position of commercial banks?
 - (1) Increase in loans by commercial banks,
 - (2) Increase in investments by commercial banks,
 - (3) Importation of gold,
 - (4) Return flow of currency from circulation,
 - (5) Purchase of securities by Federal Reserve banks,
 - (6) Increase in loans by Federal Reserve banks to member banks?
4. (a) State and explain the quantity theory of money. (b) Show how this theory is misunderstood or misapplied.
5. State whether you believe prices can be controlled by each of the following methods, and give reasons for your belief:
 - (a) Manipulation of credit,
 - (b) Change in the weight of the gold dollar.
- 6 Explain how the level of commodity prices may be affected (a) by currency inflation; (b) by credit inflation.

Problems

- 1 Prepare from the Federal Reserve Bulletins a table showing: (1) total bank deposits in the United States, exclusive of interbank deposits, as of the various call dates from 1928 to 1939; (2) United States wholesale price index for (a) all commodities, (b) farm products, (c) foods, and (d) cost of living index for the month of the call dates. What is the relationship, if any, between total bank deposits and each of the above indices?
2. Prepare a table from the Monthly Bulletin of Statistics of the League of Nations showing the monthly average quotation of the dollar in Paris for the years 1933, 1934, and 1935, and, from the Federal Reserve Bulletins, the United States average wholesale commodity price and cost of living indices (listed in Problem 1) for the same period. What is the relationship, if any, between the depreciation of the dollar and these price indices?

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CHAPTER 22

Foreign Exchange

Meaning. The term "foreign exchange" may be broadly defined as foreign currency and money claims expressed in the units of account of another country. Thus, a note of the Bank of France (bank note) is money in France but is foreign exchange in the United States. Foreign exchange is a commodity, the price or "rate of exchange" of which fluctuates in accordance with demand and supply.

In the case of currencies on the gold standard, the price range is fixed by the "gold points." The mutual interchangeability of the gold standard currencies at rates limited by the "gold points" is due to the fact that each currency unit is exchangeable for a certain quantity of gold of a certain fineness as defined by law. For example, since the passage of the Gold Reserve Act of January 30, 1934, the United States dollar contains 15 5/21 grains of gold 9/10 fine. The French franc, on the other hand, by the law of June 25, 1928, had a content of 1.01081565 grains of gold 9/10 fine. Hence the equivalent or the exchange (mint) parity of the French franc in terms of dollars was 6.6335 cents at that time.

Ordinarily, and so long as the respective countries adhered to the gold standard and permitted free exportation of gold, the value of the franc in terms of dollars could fluctuate only within a range of 10 points (1/10 of 1¢). When the French franc was sold in New York at 6.59 cents, it became profitable to import gold from France to the United States. On the other hand, when the French franc was selling at 6.69 cents, it became profitable to ship gold from the United States to France. The point at which it becomes profitable

to ship gold from the United States is called the gold export point, and the point at which it becomes profitable to import gold into the United States is called the gold import point. The gold points are determined by the cost of shipping gold. This cost is composed of the following factors: (a) packing and cartage to and from terminals or piers; (b) transportation by land, water, or air; (c) insurance; (d) loss of interest while gold is in transit. The following example shows the calculation of the gold points of the French franc in relation to the dollar under conditions in existence in 1938:

COST OF SHIPPING GOLD FROM PARIS TO NEW YORK
VIA CHERBOURG

Cost	888 6677 Kilos at Fcs. 16,963 528		Fcs 15,074,939.41
Plus	Packing in Paris (4 bars per box)		270
	(Fcs. 15 per box)		
	Trucking in Paris		200
	Railway expenses (Paris to Cherbourg)		2,000
	Loading charges at steamer		90
	Convoy expenses		2,400
	Miscellaneous		200
	Ocean Freight $\frac{1}{4}\%$		37,687.35
			<hr/>
			Fcs 15,117,786.76
	888 6677 Kilos at \$1,125.28...		\$1,000,000
Less	Cartage	\$ 40	
	Customs	10	
	Melting charge	28.60	
	$\frac{1}{4}\%$ Assay Commission	2,500	
	Insurance	450	
		<hr/>	3,028 60
			<hr/>
			\$996,971.40

\$996,971.40 ÷ 15,117,786.76 equals 6.59469151 cents per franc, which is the import point without interest and possible weight loss.

COST OF SHIPPING GOLD FROM NEW YORK TO PARIS
VIA CHERBOURG

Cost	888 6677 Kilos at \$1,125 28.		\$1,000,000
Plus	$\frac{1}{4}\%$ Assay Office commission		2,500
	Packing		42
	Cartage		40
	Customs entry		10
	Ocean freight		2,500
	Insurance		450
			<hr/>
			\$1,005,542
	888.6677 Kilos at Fcs. 16,919.084*		Fcs. 15,035,443.46
Less	Railway expense (Cherbourg to Paris)	Fcs. 2,000	
	Unloading charge at steamer	60	
	Customs duty	226.50	
	Trucking in Paris	200	
	Assay— $\frac{1}{4}\%$	1,880	

COST OF SHIPPING GOLD FROM NEW YORK TO PARIS
VIA CHERBOURG (*Continued*)

Convoy expense.....	2,400	
Miscellaneous	228	
	<hr/>	
		6,994.50
		<hr/>
		Fcs. 15,028,448.96

\$1,005,542 ÷ 15,028,448 96 equals 6.69092334 cents per franc, which is the export point without interest and possible weight loss.

* Net price after deduction of coinage charges

The reason why the cost of shipping gold determines the extent to which the exchange of a country on the gold standard can fluctuate will become apparent from the following example: If the French franc in New York were sold at 6.71 cents, American banks would calculate whether, through the shipment of gold to France and its sale to the Bank of France, they could not acquire francs at a lower price than that quoted in New York for French funds (bills of exchange, cable transfers, etc.). If a bank found that through the shipment of gold it could actually obtain francs in Paris at 6.69 cents per franc, it would ship gold. By depositing the gold with the Bank of France it received an amount of francs based on the fixed price of one franc per 1.01081565 grains of gold 9/10 fine, less coinage and assay charges. This was due to the fact that the Bank of France was by law under obligation to buy gold at the above price less a charge to the seller for cost of coinage at the rate charged by the Paris mint. The cost of assay must also be borne by the seller.¹

Movement of exchanges. Since each currency on the gold standard represents a certain quantity of gold, the question often arises, Why should such currencies deviate from their exchange parities at all? As stated at the beginning, foreign currencies are treated as commodities, and the fluctuations of their exchange rates are guided by the same factors—namely, demand and supply. The only difference between a currency on the gold standard and any other commodity, such as coal, lies in the fact that the fluctuation of the currency is limited within a narrow range.

The demand and supply of a foreign currency depend upon the temporary balance-of-payments position of a country. If, for example, A in the United States has shipped \$100,000 worth of merchandise to France, the French importer will be under obliga-

¹ With the outbreak of World War II the free movement of gold was suspended in practically all countries.

tion to go to his bank and buy \$100,000, for which he would have to pay at the 1928 par 1,507,500 francs.² Assuming that at the same time an American importer has bought merchandise in France for 1,000,000 francs, he will be under obligation to go to his bank and buy 1,000,000 francs, for which he would have to pay, at par, \$66,335. If no other transactions take place, there will be a demand for 1,000,000 francs and a supply of 1,507,500 francs, or a demand for \$100,000 and a supply of only \$66,335, which situation may cause a slight fractional decline of the franc in terms of the dollar.

The balance of payments. The demand and supply of foreign exchange in a given country depend, as stated above, on the country's balance of payments, which comprises the total receipts of a country from foreign countries and the total payments it makes abroad. If, for example, all the payments to be made to the United States during a given year amount to 2.5 billion dollars, while the total payments which the United States has to make abroad amount to 2.4 billion dollars, the demand for dollars in the world's markets will exceed the supply. This in turn would cause the exchange rate of the dollar to rise above its parity, leading to shipments of gold to the United States, unless of course the recipients of these funds or other owners of dollars are willing to lend dollars abroad, thus satisfying the demand for dollars.

The items that enter into the balance of payments of a country may be classified as follows:

(1) *Foreign trade.* Exports of commodities from a country give that country a supply of foreign exchange. Imports, on the other hand, create a demand for foreign exchange. This is obvious because, if a foreigner has bought merchandise in this country, he will have to buy dollars in order to pay for the goods. Similarly, if an American has bought merchandise abroad, he will have to buy foreign exchange. A country which has an excess of exports over imports has on this score a greater supply than there is a demand for foreign exchange.

(2) *Services.* This item includes: (a) transportation and communication; (b) tourist expenditures; (c) immigrant remittances and contributions by charitable and other institutions; (d) interest, dividends, and commissions; (e) insurance, royalties, and advertising. Military expenditures by the armies of one country in the territory of another country may be classified under the same

²The parity of the franc has since been changed several times.

category. The effect of the payment for services on the movement of foreign exchange is the same as that of the exportation or the importation of commodities. The country receiving the services of other countries has to pay for them, and this in turn creates a demand for foreign exchange. If American wheat is shipped to Europe in British boats and is insured in a British company, America will have to pay for these services in pounds sterling. When Americans travel abroad, they create a demand for foreign exchange. Although the American tourist may pay his expenses abroad with American Express Company or other travelers' checks, which he purchased at home without creating a demand for foreign exchange, yet when abroad he will sell the travelers' checks in exchange for local currency, thus creating a supply of dollar exchange on the foreign market. The travelers' checks are returned to the United States, where they are used either for the building up of credit balances with American banks or for payment for services and imports from the United States. Immigrant remittances and charitable contributions sent abroad create a demand for foreign exchange.

Payment of interest and dividends to investors in foreign countries affects the foreign exchange market, since the remittance of funds to American investors creates either a demand for dollars abroad or a supply of foreign exchange in this country.

(3) *Short-term and long-term capital movements.* These consist of the following: (a) foreign bank balances, advances, and overdrafts; (b) acceptances and short-term foreign loans; (c) foreign bond issues and amortization payments; (d) direct investments abroad. When Americans buy foreign securities, or when an American bank extends a credit to a foreign bank, dollars are placed at the disposal of foreigners, since obviously Americans have dollars and not foreign currency. When the foreign borrower or issuer of the foreign securities wishes to utilize the dollars thus obtained, he will offer them for sale abroad or will bid for foreign exchange in the New York market. Either procedure creates a demand for foreign currencies and a supply of dollars. If the supply exceeds the demand, the currency of that country will move up in relationship to the dollar. It may go beyond the gold export point in the United States and therefore result in an outflow of gold from this country.

Amortization of foreign obligations outstanding in this country has just the opposite effect. When a foreign corporation or munic-

ipality has borrowed money in this country, it is under obligation to pay regularly interest and a certain percentage of principal. The corporation accumulates balances with its own bank and, a short period before payment is due, will instruct the bank to remit the required amount to its fiscal agent in the United States. The foreign bank is thus under obligation to sell local currency and to buy dollars. In this case, too, if at that particular time the demand for dollars exceeds the supply, the exchange rate of the foreign currency in relation to the dollar may reach the gold export point and the foreign banks may find it profitable to ship gold to the United States instead of buying dollar drafts. However, under normal conditions when most of the countries are on the gold standard, gold shipments rarely take place, as the international accounts are usually balanced by means of loans, long-term or short-term, made by capital-rich to capital-poor countries.

On the other hand, in abnormal times, particularly during periods of great financial uncertainty, the withdrawal of funds by creditors from debtor countries or the flight of capital may set in motion large exports of gold. For example, the financial panic that developed on the continent of Europe in the late spring of 1931 caused a recall of loans and withdrawal of deposits by foreigners from Germany and a flight of German capital abroad, which in turn resulted in an outflow of gold. Between May 30 and July 23, 1931, a period of seven weeks, the Reichsbank lost \$247,138,000 of gold (at the old parity of 1 Reichsmark = \$0.2382), or 43.4 per cent of its total gold holdings. During the same time the Reichsbank used up new foreign credits in the amount of \$150,000,000, and only rigid foreign exchange restrictions and "standstill" agreements brought the gold outflow to a halt.

When the panic spread from Germany to England, that country lost during July, August, and up to the 21st of September, \$144,342,000 of gold; and since it was felt that the Bank of England could not afford to lose any more gold, Great Britain suspended specie payments and the pound sterling depreciated. After the abandonment of the gold standard by Great Britain, panicky creditors from all over the world began to withdraw balances maintained in the United States; this led to an outflow of \$702,000,000 of gold from this country during September and October, 1931. On the other hand, during the Sudetenland crisis in September and October, 1938, and in April, 1939, following the breakup of Czechoslovakia, gold imports into the United States amounted to about

\$521,000,000, \$562,000,000, and \$606,000,000, respectively. Such abnormal movements of gold, however, are the exception, and as a rule gold shipments are used merely as a last resort to meet marginal amounts of the balance of payments.

Currencies of countries off the gold standard. As stated before, the fluctuation—that is, the exchange rate of a currency on the gold standard—is limited by the so-called gold points. However, once a country abandons the gold standard and the central bank is relieved of the obligation of redeeming its currency in gold or of selling gold at a fixed price, the fluctuations of the currency have practically no limit. The gold points lose their significance, since gold is not freely obtainable in exchange for notes at par. Thus, for example, when England abandoned the gold standard on September 21, 1931, the pound sterling began to decline immediately, so that before the year was over it had depreciated by 30.68 per cent. Similarly, when in March, 1933, the United States abandoned the gold standard by prohibiting the free redemption of notes and exportation of gold, the dollar immediately depreciated substantially below its gold export point, and at the end of April, 1933, was selling at 10.14 per cent below its gold parity.

As in the case of any other commodity, the demand and supply of foreign exchange is influenced by speculative operations. However, so long as a currency is linked up to gold, the margin of the speculators' profit is rather small, since the range of fluctuation of such currency is confined within the gold points. Once a country is off the gold standard, speculative transactions increase in volume and may even become the dominant element in the foreign exchange market, because the widening of the price range attracts more speculators. If foreign exchange operators wish to make a raid on a foreign currency, they can, for example, sell that currency for future delivery (90-day bills) in the market. This increases the supply of the bills, the legitimate demand remaining more or less constant, and this may cause a depreciation of that currency.

A country off the gold standard, or one whose abandonment of the gold standard is being rumored, will be subject to withdrawal of foreign balances and also to the flight of capital. Foreigners wishing to withdraw their balances from a particular country will offer for sale the exchange of that country in order to convert it into currency of their own country or that of other countries. This, of course, increases the supply of the exchange involved and contrib-

utes to its decline. In the case of a flight of capital, people sell the currency of their own country in order to convert it into that of one or several countries. A flight of capital thus increases the demand for foreign exchange and thereby contributes to the decline of the currency that is being sold. Raids on the exchanges of foreign countries, as well as flights of capital, have occurred rather often since the middle of 1931 and have greatly contributed to the uncertainties and vagaries of the foreign exchange movements. This condition prevails until either equilibrium between demand and supply has been established or the country affected institutes foreign exchange restrictions.

The bill of exchange. The shifting of funds from one country to another is carried out as a rule through the buying and selling of bills of exchange and cable transfers, and, as previously indicated, only in exceptional cases is the transfer effected through the shipment of gold. A bill of exchange or draft is a written order issued by the drawer to a second party (the drawee) to pay to a third party (the payee) a certain sum of money on a certain date or at a future ascertainable date. Bills of exchange are divided on the basis of their maturity dates into (a) sight drafts and (b) time drafts.

Sight drafts are payable either on sight or a certain stipulated number of days after sight. Where the terms of sale are, for instance, payment fifteen days after receipt of goods, and the seller, an Argentinian exporter, does not know the exact date when his shipment will reach the importer in New York, he will draw a draft on the New York merchant for payment fifteen days after sight and forward it together with the bill of lading and the other required export documents through his bank to a New York City bank. Upon arrival of the shipment, the New York bank will turn over the bill of lading representing title to the goods to the importer against the latter's acceptance of the draft. The importer obligates himself to pay (accepts) the amount specified in the draft by writing across the face of the draft the customary words: Accepted on (date) payable at the XYZ bank (signature). The bill is thus due fifteen days from date of acceptance by the importer.

Time drafts specify a definite date when payment is to be made. An importer in the United States who has purchased merchandise in a foreign country, let us say France, will have to make payment in French francs. Let us assume that the contract calls for pay-

ment within 30 days. In this case the importer in the United States will buy from his bank a French franc draft on a bank in France, due in 30 days.

In contrast to the bill of exchange which matures at some future date, cable transfers effect immediate payment. If, for example, in the previous case, the importer wishes to make payment by cable, he will go to his bank, pay the necessary amount of dollars, and instruct the bank to cable its correspondent in Paris to pay the certain amount of French francs to the French exporter. In such a case, payment to the exporter will be made instantly. Rates of exchange, therefore, are quoted for: (a) cable; (b) sight bills; and (c) time drafts, which usually run from 30 to 90 days. As a rule, the rate for cable transfers is the highest, followed by the rate for sight bills and then the rates for time bills.

Under normal conditions the difference in the rates is governed mainly by the prevailing interest rates. In case of a cable transfer, the bank receives the amount in local currency and immediately orders its correspondent abroad to effect payment in the respective foreign currency. Thus, the cash of the bank increases, but at the same time its foreign balance decreases by an equivalent amount, and consequently no interest is involved in the transaction. On the other hand, when an importer goes to the bank and buys a time bill which will mature in 90 days, the importer pays the money to the bank immediately. The bank is under no obligation to remit the money to its correspondent until one day prior to the maturity of the bill. In this case, therefore, the bank will have the use of the money of the importer, and the difference between the cable rate and the 90-day bill is the rate of interest prevailing in the country on which the bill is drawn.

Whenever the spread between the rate for cable transfer (spot rate) and the rate for time bills (forward rate) is wider than the interest involved would warrant, it is an indication that the foreign exchange market is working under abnormal conditions. The equilibrium of the market is often upset when foreign exchange dealers and exchange speculators expect a rapid depreciation or appreciation of the currency in question. Thus, for example, during April, 1935, 90-day bills on Holland were selling at a discount of about 5 per cent under the spot rate. This was due to the fact that a number of people in the United States expected the guilder to depreciate. In order to profit from this depreciation, they sold short forward guilder. Since, however, the demand for 90-day guilder

was very small, the discount or cost of risk grew rapidly. However, once the fear of currency depreciation disappeared and the shortsellers endeavored to cover, the demand for time bills increased, and the abnormal spread disappeared.

At times, however, the rate of 90-day bills is higher than the spot rate. This situation arises particularly in periods when it is expected that the exchange rate of the foreign currency in question will rise sharply.

Bills of exchange may be divided into the following classes: (1) bills drawn on and accepted by banks are termed bankers bills or acceptances; (2) bills endorsed by banks and often considered as equivalent to bankers' acceptances; (3) trade bills, being those in which both the drawer and drawee are individuals or firms other than banks. As a rule, bankers' acceptances sell at a lower discount rate (higher price) than trade bills. Bills are also often divided in accordance with the currency in which they are stated. Thus, one often finds the expression "dollar acceptances" and "foreign exchange acceptances."

Reasons for the abandonment of the gold standard. In general (the first exception being the United States when it abandoned gold in March, 1933), major countries have left the gold standard only when confronted with a major crisis such as that which forced England off the gold standard in 1931. London, as a very important international financial center, attracted short-term funds from all over the world; these were invested in the London money market. During the post-war period, and particularly after the return to the gold standard in May, 1925, London placed a considerable portion of these funds in foreign long-term securities and short-term loans in a number of continental European countries, notably Germany. When the German banking crisis occurred in July, 1931, and it became evident that London would not be able to withdraw its balances from Germany, a number of foreigners began to withdraw their balances from London. This, of course, meant that foreigners were selling pounds sterling and converting them into currencies of their own countries, such as dollars or French francs. The result was that the pound sterling declined below the gold export point, and the Bank of England during July and August and up to September 21, 1931, lost over 144,000,000 dollars of gold (old parity), or 18.2 per cent of its total gold holdings. During the same period the Bank of England and the British Treasury borrowed on two occasions, in the United States and in France, a total

of \$650,000,000 in order to meet the panicky withdrawals of foreign balances. But when the proceeds of these loans were exhausted and foreigners still continued to sell pounds and convert them into dollars or other currencies, Great Britain was forced to suspend specie payments, and the pound sterling declined.

The suspension of specie payments in Great Britain merely consisted of relieving the Bank of England of its obligation to sell gold at a fixed price—namely, at 3 pounds 17 shillings and 10½ pence per troy ounce of standard fineness. The exportation of gold prior to the declaration of a state of war on September 3, 1939, however, was not prohibited, and individuals could buy gold in the London open market and export it to wherever they desired. The price of gold in terms of British currency increased, as may be seen from the following table.

PRICE OF GOLD IN LONDON
(Monthly average; per ounce fine)

			s.	d.
August	1931.	. . . . .	84	11.17
"	1932 .	. . . . .	118	6.23
"	1933 .	. . . . .	125	8.79
"	1934 .	. . . . .	138	7.15
May	1935 .	. . . . .	140	3 06
"	1936..	. . . . .	138	4.24
August	1937 .	. . . . .	139	6.38
"	1938 .	. . . . .	142	5.69
"	1939 .	. . . . .	150	5 54
September	1939 .	. . . . .	168	0.00
July	1945...	. . . . .	172	3.00

With the abandonment of the gold standard by Great Britain, a number of other countries followed suit, chiefly those comprising the British Empire and the Scandinavian countries. Their action was motivated by the fact that a considerable portion of their trade was with Great Britain, where they maintained large balances, and that the maintenance of their currency at the original parity would have greatly handicapped them in their trade with Great Britain.

The United States abandoned the gold standard in 1933 voluntarily, not having been forced to do so by too great a drain on the gold resources of the country. Although the monetary stock of gold in the United States was reduced from \$4,995,000,000 at the end of August, 1931, to \$3,919,000,000 at the end of June, 1932 (a loss of \$1,076,000,000 during 10 months), the exports of gold ceased in July, 1932, and from that month to the end of January, 1933, the

monetary gold stock increased by \$634,000,000. Notwithstanding the fact that the country's stock of gold decreased by \$305,000,000 between February 1 and March 4, 1933, the date of the closing of the Federal Reserve banks, the monetary gold stock was still somewhat above the average of the two years 1928 and 1929. The monetary gold stock at the end of February, 1933, amounted to \$4,380,000,000, and the country could easily have withstood the drain of the yellow metal. So general was the trend toward the abandonment of the gold standard and the devaluation of the currency, however, that by the end of 1936 only Belgium still adhered to the gold standard. The belga, however, was devalued on April 1, 1936, at 28 per cent below its former parity.

Classification of currencies. As a result of the world-wide depression and of the financial crisis which began in 1931, the currencies of the nations lost their common relationship to gold, and the following groups evolved: (1) the sterling bloc; (2) the gold bloc; (3) the dollar bloc; and (4) currencies of countries with rigid foreign exchange restrictions.

(1) *The sterling bloc.* The sterling bloc embraces a number of countries the currencies of which are pegged to the pound sterling. These countries are Great Britain, Australia, New Zealand, South Africa, Egypt, Straits Settlements, and the British Crown colonies and protectorates, as well as the mandated territories. Prior to the outbreak of the war in 1939, the Scandinavian countries, namely, Sweden, Norway, Denmark, and Finland belonged to the sterling bloc. Although Japan, Argentina, Portugal, and Siam were not members of the sterling bloc, their currencies, prior to the outbreak of the war, tended to move in harmony with the pound sterling. Canada does not belong to the sterling bloc, as its currency fluctuates somewhat between the United States dollar and the pound sterling.

As stated, the currencies of the sterling bloc were pegged, that is, maintained at a more or less fixed exchange relationship to the pound sterling. This pegging consists of the buying and selling of pounds sterling by the respective central banks in order to prevent a depreciation or an appreciation of the exchange rates of their currencies in relation to the pound. For the purpose of executing these pegging transactions, the central banks of the sterling bloc countries maintain balances in London. Although all the currencies in the sterling bloc are, so to say, on a paper basis and fluctuate almost daily in relation to gold, they are stable in relation to

one another and to the pound sterling. Since most of their trade and their financial relations are with the other members of the sterling bloc, their currencies are, for all practical purposes, stable. In order to facilitate the maintenance of the stability of the various sterling bloc currencies in relationship to the pound, the British Government has modified its embargo on foreign loans and permitted the extension of credit by British institutions to countries in the sterling bloc.

The successful operation of the sterling bloc, aided by the British Exchange Equalization Fund, has given rise to the belief that it is possible to achieve international stability of currencies on a paper basis. Thus the *Monthly Review* of the Midland Bank (October-November, 1933), in discussing business recovery in the sterling bloc, states: "Notwithstanding that sterling is a pure managed currency, almost completely divorced from gold for an indefinite period, it provides the only basis of true monetary stability in the world today; neither gold nor the dollar can at present provide the same degree of steadiness in purchasing power as the pound is showing and seems likely to maintain . . . further, Great Britain has become the center of a vast area of trade, both national and international, in currencies based upon the pound sterling, so that on physical measurements alone the behavior of the pound in relation to commodities is perhaps the strongest single factor in world conditions,"—all of which is a typical example of the satisfaction expressed by members of the sterling bloc.

When Great Britain on August 25, 1939, under the then imminent outbreak of war, suspended the Exchange Equalisation Account's support of the pound, most of the non-British Empire countries severed their adherence to the sterling bloc. France, however, which joined the bloc in May, 1938, continued pegging the franc to the pound sterling.

(2) *Gold bloc countries.* Prior to the outbreak of World War II, there were several European countries which continued to adhere to the gold standard and refused to devalue their currencies because they believed that such a measure would be harmful to their economies. These countries were known as the "gold bloc" countries. However, even they abandoned this policy toward the end of 1936, and from that time on no country of any importance adhered to the gold standard.

The theory underlying the devaluation of a currency is that a lower exchange rate favors exports and tends to reduce imports;

and that, with the rising prices that would ensue, business conditions at home would improve. The countries adhering to the gold bloc have taken the view that under present conditions the devaluation of a currency is no important factor in the foreign trade of a country. They pointed to the fact that since the depression the movement of international commodities has not been determined by the price structure but rather by the various trade agreements, such as clearing and compensation arrangements, and by trade impediments such as foreign exchange restrictions, quotas, and prohibitive tariffs.

A review of economic conditions of the world in the middle of 1936 showed that most countries had surrounded themselves with foreign exchange restrictions giving the government a monopoly in foreign exchange operations. Governments were making it a practice to sell foreign exchange either for the importation of commodities which were considered of prime necessity or for payment for imports from countries that were large buyers of their own commodities. Under such circumstances prices are of relatively little significance.

Quota systems have the same effect. In essence they mean that a country fixes the quantity or value of certain commodities which may be imported from various countries during a certain period. Once this maximum is reached, no more can be imported from a particular country, no matter how attractive the price structure may be. Prohibitive tariffs are a method of keeping out commodities from abroad by raising the customs duties to a point where the total cost results in a higher price for the foreign goods than for domestic commodities.

Clearing and compensation agreements are the logical sequence to foreign exchange restrictions. The agreements cover either the whole trade of two countries for a specified period, or they refer only to one or more transactions in certain commodities. Stripped of all technicalities, a clearing agreement stipulates that importers in country *A* pay in national currency for the imports from country *B* to a designated agency (usually the central bank) in country *A*, and the agency in turn will use the funds to pay exporters in country *A* for their exports to country *B*. The same procedure is followed by the importers and exporters in country *B*. Importers in both countries thus pay in their own respective currencies not to the foreign exporters but to their special agencies, and exporters are paid in their national currency not by the foreign customer but

by the special agency. The transfer of funds across national borders involving an exchange of currencies is eliminated. The clearing agreement also fixes the exchange rates to be used and provides for the disposal of any amount that may remain at the agency after the exporters in both countries have been paid.

The essence of a compensation agreement is that importers in country *A* obligate themselves to import a certain quantity or value of a given commodity from country *B*, and importers of country *B* in turn will import a specified quantity or value of one or more given commodities from country *A*. Payment is made through designated agencies.

Under such circumstances, the gold bloc countries asserted that a devaluation of the currency could not bring about an increase in their exports. On the other hand, they pointed out that if their currencies were to be devalued, they would have to pay more for the imported commodities. This was of particular importance to Holland and Switzerland, countries which have shown a continued excess of imports over exports. Since these countries meet their trade deficit largely with income from foreign investments, a depreciation of the currency would mean that foreigners would pay their debts in depreciated currencies. This is particularly true in view of the fact that the gold clause has been greatly undermined by Public Resolution 10 of the United States and by the decision of the Supreme Court of the United States which practically sanctioned the Public Resolution.

France was, however, compelled to abandon the gold standard as a result of the large losses of gold by the Bank of France in 1935 and 1936, caused partly by the deterioration of the balance of trade and of other elements in the balance of payments, and, in the main, by the flight of capital induced by uncertain domestic political conditions. Between March, 1935, and September 26, 1936, when the gold standard was suspended, the gold reserves of the Bank of France were reduced by more than \$2,100,000,000, reflecting almost entirely exports of capital.

The tripartite monetary agreements. The announcement by the French Government on September 25, 1936, of its decision to devalue the franc was contained in a declaration similar to the statements issued simultaneously by the Treasuries of the United States and Great Britain. In their statements the three Governments declared that the object of their monetary policy was "to maintain the greatest possible equilibrium in the system of international ex-

changes and to avoid to the utmost extent the creation of any disturbance of that system" by their monetary action. The three Governments would "use the appropriate available resources so as to avoid as far as possible any disturbance of the basis of international exchanges resulting from the proposed readjustment" of the franc and would arrange for mutual consultation "for this purpose as may prove necessary." On September 26 the Belgian Government announced its adherence to the tripartite declaration, and on November 21 the Netherlands and Swiss Governments followed suit.

The release of the Bank of France from the obligation to redeem its notes into gold rendered inoperative the United States and British stabilization funds, since they could no longer convert into gold their respective pound sterling and dollar balances by exchanging them into French franc balances. Consequently, on October 13, 1936, the United States Treasury announced that, subject to revocation on twenty-four hours' notice, it would sell at \$35 per fine ounce plus $\frac{1}{4}$ per cent handling charge for "immediate export to, or earmark for the account of, the exchange equalization or stabilization funds of those countries whose funds likewise are offering to sell gold to the United States." In the same announcement the Treasury declared that Great Britain and France had agreed to comply with the above-stated conditions. On November 27, 1936, Belgium, the Netherlands, and Switzerland became parties to the arrangement for the free exchange of gold.

The operation of the various stabilization funds under the foregoing arrangement maintained remarkable stability of the currencies and provided under the existing conditions a satisfactory substitute for the defunct international gold standard. Although only six countries adhered to the agreement, the benefit of stable exchanges accrued to a large number of countries the currencies of which were directly or indirectly attached to the currencies of the signatories to the agreement. The emergency monetary laws put into effect in Great Britain and France at the outbreak of the European war in September, 1939, not only rendered the Exchange Stabilization Fund of the United States "pretty much inoperative" as far as Great Britain and France were concerned, but also caused defections from the sterling bloc.

(3) *The dollar bloc.* The dollar bloc embraced a number of Central and South American countries (Cuba, Colombia, Mexico, Panama) whose currencies were pegged to and moved in unison

with the United States dollar. The countries of the dollar bloc maintained the stability of their currencies in relationship to the dollar in the same manner that countries of the sterling bloc managed to maintain the stability of their exchanges in relation to the pound.

(4) *Currencies subject to exchange restrictions.* During the early part of the 1930's, a number of countries adopted rigid exchange restrictions limiting the international movement of gold, funds, and securities. After the outbreak of the war practically all countries adopted such restrictions. In the United States, foreign exchange control was instituted in order to prevent trading with the enemy. In addition the Government froze the assets held in the United States by foreigners, in order to prevent their use by the enemy.

Exchange restrictions are official measures intended to conserve the foreign exchange resources of the country and to control exchange rates through limitation of the freedom, or monopolization, of foreign exchange transactions. Foreign exchange restrictions are imposed by countries whenever, owing to an adverse balance of payments, the demand for foreign exchange exceeds the supply and the central bank is unwilling or unable to ship gold abroad. If the foreign exchange market were left unregulated, the exchange value of the currency would decline, leading to a flight from the currency by the nationals of that country and withdrawals of balances by foreign creditors, which in turn would cause a further decline of the currency.

The essence of foreign exchange restrictions may be briefly summarized as follows: All foreign exchange operations are placed by the government under the administration of the central bank or of a specially created body. No payments can be effected abroad without approval of this authority. Purchases of foreign exchange, and the importation and exportation of securities and of domestic and foreign bank notes, are restricted or prohibited. Residents are required by law to surrender foreign exchange obtained through current exports and services abroad and to put at the disposal of the foreign exchange authority their balances abroad, foreign bills, and currencies and securities held at home or abroad, for which they are paid in domestic currency, usually at the official rate of exchange. Foreigners are prohibited from withdrawing their balances in foreign currencies or converting their domestic currency balances into foreign exchange. The controlling authority sells

foreign exchange primarily to make payments for approved imports and for certain expenditures abroad.

The exchange rates of countries with foreign exchange restrictions, however, are fictitious, since these currencies are not freely convertible into gold or into currencies of other countries, and only a small amount of the exchange needed to meet payments abroad is obtained at the official rate.

Blocked currencies. Some countries which have instituted foreign exchange restrictions, and particularly those heavily burdened with foreign debts on which they have declared a transfer moratorium or have defaulted, have introduced a system of blocked accounts. These accounts represent balances due to foreigners in domestic currency which may be used only within the respective countries. While some of the countries grant the owner unrestricted use of his balances, the majority limit the use of blocked accounts to special types of investments (mostly long-term) or for special use within the country. Blocked balances are traded at a discount which varies in accordance with the limitations placed on their use.

Currencies with multiple exchange rates. In certain countries, as, for example, Austria, prior to 1938, the foreign exchange regulations permitted the exporter to retain part of the foreign exchange, which he might sell in a free market at rates usually higher than the official rate. This gave rise to two exchange rates: the official and market rates. The Chilean exchange control laws gave rise to four different rates of exchange for the currency: (a) the official rate, (b) the export rate, (c) the unofficial rate, and (d) the compensation rate. The official rate is the rate at which the Central Bank of Chile buys gold and foreign exchange and at which it sells foreign exchange to parties duly authorized by the International Exchange Committee (the exchange administrative authority) to make payments abroad. As the official rate is much lower than the free market rate, only those obligated by law sell foreign exchange at the official rate to the Central Bank, and such foreign exchange is allotted to importers of commodities of prime necessity and to the government for its current foreign payments. The percentage of foreign exchange proceeds from exports which exporters must sell to the Central Bank at the official rate varied early in 1935 from 1 to 10 per cent for different commodities and amounted to 20 per cent in the case of wool and skins (Law of September, 1932).

The export rate is the rate paid by holders of permits to transfer funds abroad to Chilean exporters for that portion of foreign exchange which they are not obliged to sell to the Central Bank and which does not arise out of exports to countries with which Chile has concluded compensation agreements. The rate is determined by demand and supply, and it is higher than the official rate.

The unofficial rate is the rate paid in the so-called "black market," where foreign exchange derived from transactions outside the scope of the Commission is traded. The unofficial rate slightly exceeded the export rate, but with the improvement of the balance of payments and the consequent increased supply of foreign exchange, it dropped below the export rate.

The compensation rate grew out of the compensatory trade agreements with various countries. These agreements usually provide that part of the proceeds of nitrate imports from Chile shall be retained by the importing country and applied for payment of current exports from that country to Chile. The rate was fixed by law (February, 1934) at 250 per cent above the official rate on the date of payment. Thus, when the official rate of the French franc was 0.644 pesos, the compensation rate was 1.61 pesos.

Questions for Study and Review

1. Define foreign exchange, bill of exchange, sight bill, gold point.
2. Discuss the chief sources of demand for and supply of foreign exchange.
3. List the principal items that enter into the balance of payments.
4. List and explain various factors which cause the price of cable transfers to vary from that of time drafts.
5. Explain various reasons for abandoning the gold standard.
6. State the meaning of the following terms: sterling bloc, gold bloc, dollar bloc, clearing agreement, compensation agreement.
7. List and explain various ways of restricting exchange transactions.

Problems

1. The Netherlands florin contains 10.370505 grains of gold $\frac{9}{10}$ fine. What is the florin's exchange (mint) parity in terms of U. S. dollars: (a) prior to January 31, 1934 ($\$1 = 25 \frac{8}{10}$ grains of gold $\frac{9}{10}$ fine); (b) after January 31, 1934?

2. A New York City bank asks \$40,000 for cable transfer of 10,000 Australian pounds to Sydney, Australia. How much would the buyer have to pay for 10,000 Australian pounds issued in: (a) sight draft on Sydney, Australia; (b) 90-day bill on Sydney, Australia? The prevailing interest rate to customers is 6 per cent per annum, the mail time from New York to Sydney, Australia, is 30 days.

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CHAPTER 23

Financing Foreign Trade

Characteristics of foreign trade. The peculiar characteristics of foreign trade in general, and with individual countries in particular, make the financing of foreign trade different in many aspects from the financing of domestic trade. The selection of the proper method of financing a special transaction is a matter equal in its importance to the terms of the underlying contract of sale. Many foreign commercial deals profitable in themselves have resulted in losses to one or both contracting parties owing to the employment of an unsuitable method of financing.

In domestic trade there is no currency problem involved in settling the transaction, since the buyer and seller are located in the same country. In foreign trade, on the other hand, since the buyer and seller are located in different countries, the question of currency is of the utmost importance. The buyer not only is under obligation to raise the money in local currency, but may also be required to exchange it into the currency of the seller and remit it abroad; this requires the aid of a bank for the exchange and transfer operation. Where the sales agreement provides for payment in the currency of the buyer, the seller will have to convert the foreign exchange into his own currency; this also requires the services of a bank. Thus, aside from the usual risk inherent in every business transaction, there is an additional risk characteristic of international transactions—that is, the currency risk. When, for example, a contract between an American exporter and an English importer provides for shipment of a definite quantity of a certain article at \$5 per unit payable in dollars, the importer will have to buy dollars—that is, exchange English pounds for dollars. Assum-

ing that the importer calculated the cost of the article in pounds sterling on the basis of $\text{£}1 = \$5$, which was the actual rate on the date of the agreement, and that at the time when payment is made the pound sterling is quoted at only $\$4.25$, the cost of the article to the importer would be 1 pound 3 shillings and 6 pence instead of one pound.

However, the currency risk can be transferred from the importer or exporter to a bank in the following manner. On the date the purchase and sale agreement is entered into, the importer can buy (cover) from a bank the required amount of dollars at $\text{£}1 = \$5$ for delivery on the day payment is due to the exporter (future or forward exchange). When the exporter is to be paid in pounds sterling at some future date, he can eliminate the currency risk by selling to a bank forward London exchange. The bank, in turn, usually does not assume any exchange risk, but acts merely as a broker and covers its exchange commitments the same day or even the same hour that they have been made.

Government regulations. In internal trade, legitimate transactions are normally free from interference by governments of democratic countries. This, however, is not always the case in foreign trade. Since the trade of a country with the rest of the world affects the economic and often the political status of the country, the governments are exercising far-reaching supervisory and regulatory powers over this branch of economic activity. The governments not merely have the power to raise tariffs on the importation of certain types of commodities or on imports from certain countries, but also have the power to regulate the volume of commodities imported, through the quota system, and may impose all kinds of restrictions on the dealings in foreign exchange and thus make the financing of imports extremely hazardous. Between 1931 and 1936 the majority of the nations of the world instituted foreign exchange restrictions, making it now imperative for the buyer or importer, prior to the placing of an order abroad, to ascertain from the foreign exchange control body of his country whether it will sell the foreign exchange required for the importation of a given commodity. The exporter must equally follow up the exchange laws of the foreign countries and assure himself that the importer will not be prohibited from remitting the invoice amount.

The foreign trade and exchange regulations are not of a permanent nature and are constantly modified and adapted to changing conditions, and it is thus necessary for those engaged in foreign

trade to alter accordingly their methods of financing. The banks keep themselves informed of the various foreign trade and exchange regulations, and are therefore in a position to assist exporters and importers.

A time element. The time element is another important factor in financing foreign trade. In international trade the distance between the points of origin and destination of a shipment is usually greater than in domestic trade. This of course means that the commodities will be longer in transit, and consequently the period of financing will be greater than in domestic trade. For example, if a merchant in Antwerp purchases wool in Australia, it will be three or four weeks before the wool will reach the importer. In the meantime somebody must carry the financial burden of the transaction. It may be either the buyer-importer or the seller-exporter, as the sales contract provides. If the agreement calls for payment upon the arrival of the shipment in Antwerp, the exporter, be he the producer himself or a middleman, will have tied up a part of his working capital for three or four weeks and consequently will have to curtail his operations. If on the other hand the importer has to pay when the commodity is put on board ship in Australia, he will tie up part of his working capital. The exporter and importer, however, are usually able to shift the burden of financing from themselves to the banks, which have the funds and machinery to finance commodities in transit or in process of manufacture. From this standpoint alone, banks are well-nigh indispensable in foreign trade in peacetime.¹

Methods of financing foreign trade. The methods of financing foreign trade may be classified as follows:

- A. Burden of financing carried by importer:
 - 1. Payment with order,
 - 2. Partial payment in advance,
 - 3. Payment on documents.
- B. Burden of financing carried by exporter:
 - 1. Consignment,
 - 2. Open book account,
 - 3. Collection drafts.
- C. Burden of financing carried by the importer's bank:
 - 1. Letter of credit,
 - 2. Authority to purchase.

¹ In wartime a large portion of the foreign trade of the belligerents is financed by their respective governments.

D. Burden of financing carried by exporter's bank:

1. Advance on collection drafts,
2. Discount of drafts,
3. Refinancing bill

Payment with order. The importer may remit directly to the exporter an amount in the exporter's currency (foreign currency bank draft, telegraphic money order) covering the cost of shipment of the goods specified in an accompanying order. In normal times payment prior to shipment was demanded only of importers whose credit standing was unsatisfactory or not known. Since 1931, owing to foreign exchange and trade regulations, importers domiciled in certain countries have been required to make payment simultaneously with placement of the order. This is not a reflection on the credit status of the importers, but a necessary precaution on the part of the exporters against the constantly changing laws regulating the transfer of funds abroad.

Partial payment in advance. The importer may be required to remit in advance a part payment of his order as evidence of good faith and intention to pay the balance in accordance with the terms of the sales contract. The partial payment must be an amount sufficient to cover the cost of shipping—that is, out-and-return freight, insurance, and sundry expenses.

Payment on documents. When the contract provides for cash on documents, the importer is under obligation to deposit the stipulated sum with a bank located in the country of the exporter. The latter, after having placed the commodities on board a vessel or on a railroad and having received all the shipping documents, turns them over to the bank, and if the documents are satisfactory he receives payment. In this case the importer is under obligation to find the necessary funds at home, to convert them into the exchange of the country where the exporter is located, and to stand the burden of financing while the commodity is in transit. In times of great uncertainty, the exporter will insist that funds be deposited in "escrow" with a bank located in his country. This means that the bank is under obligation to turn over the cash to the exporter once the latter has prepared the commodities for shipment abroad, in accordance with the contract of sale.

Consignment. An exporter maintaining agencies or employing resident salesmen abroad may ship to them commodities on consignment, meaning that he orders them to sell the commodities

while in transit or upon arrival at a fixed or best obtainable price. After the commodities have been sold, the agent converts the proceeds into the currency of the country where the exporter is located, and remits the funds. Thus the exporter not only finances the transaction, but also is compelled to assume the exchange risk.

Open book account. Selling on open book account in foreign trade does not differ materially from that in domestic trade. The exporter ships the commodities to the importer in the foreign country on agreed terms together with bill of lading, charging the account of the importer with the amount of the invoice. The exporter has no documentary evidence of his claim against the importer except the sales contract, and relies merely on the integrity of the importer, expecting that the latter will remit the amount on the specified date. Open book accounts are common among customers who have had business relationships for a large number of years and where the exporter has implicit faith in the credit standing and good faith of the importer.

As a rule, banks do not assist exporters in financing shipments on consignment or open book account. In exceptional cases banks may grant exporters loans on the evidence of the sales contract or the consignment agreement, the maturity of the loan coinciding with the terms of payment of the sales contract. In such cases the bank actually extends an unsecured credit based on the integrity of the exporter and importer.

Collection drafts. In financing foreign trade two types of drafts are used: (a) clean drafts, (b) documentary drafts. A clean draft is used by the exporter to collect an amount due from the importer for a shipment of merchandise. Such a draft is not accompanied by any documents and is drawn by the exporter on the importer in accordance with a previous arrangement.

A documentary draft is accompanied by the shipping documents and may be either a D/P draft (documents against payment) or a D/A draft (documents against acceptance). In both cases the exporter turns over to his bank for collection the draft with the annexed shipping documents, with instructions, in case of a D/P draft, not to release the shipping documents to the importer (drawee) until the amount of the draft is paid; while in case of a D/A draft the bank is authorized to release the documents when the drawee accepts the draft. The bank forwards the draft and documents with the exporter's instructions to its branch or correspondent bank in the country of the importer. The foreign bank notifies the im-

porter that the shipping documents have arrived and (in case of a D/P draft) that they will be turned over to him upon payment of the draft for the amount of the invoice. After the importer has made payment, the bank will remit the funds to the exporter's bank, and the latter in turn will credit the account of the exporter. In the case of the D/A draft, the foreign correspondent bank will turn over the documents to the importer upon his acceptance of the draft. On due date the correspondent bank will present the acceptance for payment and, after payment has been effected, the proceeds will be forwarded to the exporter as in the D/P case. In this connection it should be noted that the foreign correspondent bank, although chosen by the exporter's bank, acts as the agent of the exporter and not as the agent of the bank. If, after collection of the funds by the correspondent bank abroad, it should fail, the loss is borne by the exporter and not by his bank.

Letter of credit. A letter of credit, briefly stated, is a letter issued by a bank to a person or corporation authorizing the latter to draw drafts on the bank for a specified amount, which the bank obligates itself to accept if the drafts are drawn in accordance with the provisions stipulated in the letter. The parties involved in a letter of credit are the following: (1) the importer; (2) the importer's bank; (3) the exporter; (4) the exporter's bank. The following example will illustrate the operation of a commercial letter of credit and the way the banks assist in financing the movement of merchandise from one country to another. Let us assume that A, an importer located in Antwerp, wishes to buy merchandise in the United States. He will get in touch with the exporter in New York and arrange for the type of merchandise which he wishes to buy, the price, and the terms of payment. If the New York exporter desires a letter of credit, it is then up to the importer to obtain it. The first step taken by the importer will be to go to his bank in Antwerp for the arrangement of a letter of credit in favor of the exporter in New York.

If his credit standing is good, the bank will ask him to fill out an *application for a letter of credit*. In this document the importer requests the bank to open by mail or cable a letter of credit in favor of the exporter (beneficiary) for a stipulated maximum amount available by drafts, upon delivery by the exporter to the bank of the specified documents evidencing the shipment of the merchandise as agreed upon between the importer and exporter.

After the bank has approved the application, it asks the importer

to sign a *commercial letter of credit agreement*, which sets forth all the rights and liabilities of the bank and importer under the letter of credit.

Once these technicalities have been completed, the bank of the importer in Antwerp will request by letter or cable its correspondent in New York to open a *letter of credit* in favor of the exporter under the terms stipulated by the importer in his application for the letter of credit. After the New York bank has received this communication, it will notify the exporter that a letter of credit has been opened in his favor. The letter of credit, then, is that instrument which the bank located in the exporter's country sends to the exporter and in which it authorizes him to draw drafts upon the bank up to a certain amount and under certain conditions.

The importer's bank may not necessarily employ the services of a correspondent bank in arranging a letter of credit. At times the importer's bank, if well known and of substantial resources, as for instance the Midland Bank, Ltd., London, may send a letter of credit directly to the exporter in New York.

The exporter, having received the letter of credit, will prepare the merchandise for shipment and obtain the required documents, consisting usually of a *negotiable bill of lading, commercial invoice, consular invoice, marine insurance policy or certificate, certificate of origin, and other documents*, such as an *inspection certificate*, which may be stipulated by the importer. The exporter then draws a draft on the Midland Bank and presents the draft, together with the letter of credit and shipping documents, to his bank in New York. If this bank finds that the documents are in accordance with the specifications stated in the letter of credit, it will buy (negotiate) the draft. The exporter receives cash, or his account is credited with the amount, and the bank forwards the draft, letter of credit, and shipping documents to its London correspondent for collection. When the draft and documents are presented to the Midland Bank, the latter must honor the draft unless the documents do not comply with the stipulations of the letter of credit, which might be the case if the New York (negotiating) bank did not exercise due care in examining the documents. Where the importer's bank uses the services of a correspondent bank, the exporter draws his draft on, and presents the shipping documents to, the latter.

The description of the operation of a letter of credit indicates clearly the advantages that are derived by each party. The im-

porter derives the following advantages: (1) The burden of financing is carried by his bank, since he is under no obligation to provide the bank with funds until the draft matures. The importer may be in a position to sell the merchandise or to manufacture the imported raw materials and sell the product, and thus use the proceeds to meet the draft. (2) The importer has assurance that the documents presented by the exporter to the bank abroad will be in accordance with his stipulations in the application for the letter of credit. While the bank is not obliged to examine the merchandise as to quality, type, etc., yet it is the duty of the bank to see to it that the shipping documents correspond fully with the specifications in the application for the letter of credit. Thus, for example, if the application for the letter of credit stipulates that the shipment should consist of wheat of the standardized type, "No. 2, red," and if the documents state wheat "No. 1 Northern," the bank in the exporter's country will refuse to accept the draft. Similarly, if the application for the letter of credit calls for direct shipment from New York to Antwerp and the bill of lading indicates that the boat does not go directly to Antwerp, the bank also will refuse to honor the draft. This, of course, is a protection to the importer. (3) Importers buying on letters of credit as a rule procure more favorable prices than those not supplying letters of credit, since in the latter case the exporter assumes the burden of financing and the credit risk.

The exporter has the following advantages: He knows that the moment he has prepared the shipping documents in accordance with the letter of credit, he will be able to obtain cash for the shipment or that his draft will be accepted by a bank of known standing. Such an acceptance not only is easily convertible into cash, but also releases the exporter from any responsibility for its payment.

The most important point, however, is that the burden of financing the transaction is borne by a financial institution or by the money market as a whole and not by the exporter or the importer. This will become clearer if one traces the changes in ownership of the draft from the time it is drawn by the exporter on a bank in New York. The exporter will invariably sell his draft to his own bank or to a bill broker. The bank in turn may hold the bill until maturity, or may sell it in the open market through a bill broker. This bill may go through three or four banks and may eventually reach the Federal Reserve Bank of New York, which may purchase

it for its own account or for account of a foreign central bank. In this manner, therefore, the burden of financing is shifted to the open money market, and is carried by those institutions which have surplus funds.

Letters of credit may be classified into the following types:

Commercial letter of credit, as against traveler's letter of credit. The type of letter of credit described before is the commercial letter of credit. A traveler's letter of credit is merely an instrument sold by banks to people traveling abroad, authorizing the correspondent banks abroad to pay to the beneficiary named in the letter up to the amount stipulated in the letter of credit. The traveler's letter of credit is of no importance in financing foreign trade.

The commercial letter of credit may be divided into the following classes: revocable and irrevocable. A revocable letter of credit is one in which the bank of the importer (the credit-issuing bank) reserves the right to cancel the credit before its expiration date by giving notice to the concerned parties. From this, however, it should not be implied that a revocable letter of credit can be revoked at any time. Actual practice in the United States and in Great Britain, as well as court decisions, have held that once the exporter has essentially completed the contract, the letter of credit cannot be revoked. An irrevocable letter of credit cannot be cancelled by the issuing (importer's) bank prior to the expiration date without the consent of the beneficiary (exporter). It constitutes an obligation of the bank to accept or pay the exporter's drafts drawn in compliance with the terms of the letter of credit. The correspondent bank acts merely as an agent of the issuing bank and assumes no obligation.

A further classification is into confirmed and unconfirmed letters of credit. A confirmed letter of credit is one that the correspondent bank located in the country of the exporter has confirmed to the exporter; the bank therefore cannot revoke it under any circumstances, so long as the exporter lives up to the conditions stipulated in the application for the letter of credit. Confirmation is a definite promise of the correspondent bank that it will accept or pay the draft even if the issuing bank located in the country of the importer should refuse or be unable to honor it. Where the correspondent bank merely notifies the exporter but does not add its guaranty, the letter of credit is unconfirmed. There are consequently the following three types of letters of credit: (a) revocable by the importer's bank and unconfirmed by the correspondent (no-

tifying) bank, (b) irrevocable by the importer's bank but unconfirmed by the notifying bank, and (c) irrevocable by the importer's bank and confirmed by the notifying bank. Usually letters of credit are irrevocable and confirmed or revocable and unconfirmed. A revocable and confirmed letter of credit is impossible, since no bank will obligate itself to pay or accept the exporter's drafts if the bank abroad which acts for the importer and which has opened the credit has the right to revoke it. A confirmed irrevocable letter of credit means that neither the bank of the importer nor the bank of the exporter has the right to revoke the credit. In addition to the above major classification of letters of credit, there are the following types.

Assignable and non-assignable letters of credit. An assignable letter of credit is one which may be transferred by the beneficiary to another party. A non-assignable letter of credit is one which cannot be transferred by the beneficiary named in the letter of credit. An assignable letter of credit is usually issued to a representative of the importer when he does not as yet know who actually will be the exporter of the merchandise. Once the representative of the importer has found a suitable person or firm (exporter) able and willing to ship the goods on the importer's terms, the letter of credit will be assigned to that party.

Revolving and non-revolving letters of credit. The revolving letter of credit automatically renews the stipulated amount available to the beneficiary during a certain period of time in accordance with the terms contained in the document. This type of credit was developed to facilitate transactions between two parties who are in more or less permanent and continuous business relationship. Dealers in international commodities (staples) traded in on organized exchanges, who, owing to daily price fluctuations, usually transact their business by cable, frequently arrange for a revolving letter of credit in favor of their representative abroad. In this way they hold funds available for advantageous purchases.

The revolving letter of credit is generally adapted to the particular requirements of the parties involved, but two types have become standardized, as will be illustrated by the following examples: (1) An importer in Buenos Aires arranges for a revolving letter of credit for \$50,000 in favor of an exporter in New York, authorizing the exporter to draw on a New York bank amounts covering individual shipments. If the exporter presents to the bank the shipping documents and a draft for \$10,000, the bank will pay or accept the draft,

reducing the credit to \$40,000. However, after the importer has paid the \$10,000 draft, the original amount of the letter of credit (\$50,000) becomes again available to the exporter. If the exporter at any time exhausts the \$50,000, he can draw no more on the bank until the importer has met all or some of the drafts. In other words, the full amount of the credit or such parts thereof as have been repaid by the importer automatically become available to the exporter. (2) The exporter draws the full amount of the credit in one draft. Upon payment of the draft by the importer, the same amount is again available to the exporter under the same provisions as stipulated in the original letter of credit.

A non-revolving (fixed) letter of credit expires when the amount specified by it has been drawn up to the full extent

Another type of letter of credit is the ancillary letter of credit. It is an assisting (*ancilla* = servant) letter of credit based on an original letter of credit. The following example will illustrate it. Suppose an exporter in Australia has received a letter of credit for a shipment of wool. The exporter has no funds and no line of credit with a bank, and consequently is unable to buy the wool ordered by the importer. He therefore requests the bank which has notified him of the letter of credit to open its own letter of credit to a third party (the seller of the wool) under the identical terms contained in the importer's letter of credit. If the importer's letter of credit is irrevocable, the bank will issue its own letter of credit (ancillary letter of credit), honor the drafts of the seller (the owner of the wool) on receipt of the shipping documents, and cancel the ancillary letter of credit. The exporter presents his draft for the amount of the original letter of credit, but receives only the difference between the amount of the draft and the amount paid by the bank on the draft drawn under the ancillary letter of credit.

Authority to purchase. Another method of financing foreign trade, particularly with the Far East, is the "authority to purchase," also called "authority to negotiate." This is a letter addressed usually by a Far Eastern bank to its branch or agency abroad instructing it to buy (negotiate) the drafts drawn by an exporter or an importer located in the Far East. The following example will illustrate the operation of an authority to purchase. Let us assume that *A* in Shanghai has bought machinery from *B* in New York, payment to be by 90-day drafts. *A* and *B* have had business relations over a long period of time, and *B* has no anxiety over the credit standing of *A*. However, *B* has exhausted his line

of credit and is unable to discount the bill drawn by him on the Chinese importer. He therefore asks the importer, *A*, to arrange for an authority to purchase. *A* goes to his bank, let us say the Bank of China, and applies for an authority to purchase. In the application *A* requests his bank to instruct by mail or cable its agent in New York to purchase the 90-day draft drawn by *B* (exporter) on *A* (applicant-importer) for a certain amount if accompanied by documents evidencing a shipment of machinery prior to a specified date. If the bank approves the application, *A* signs a "letter of guaranty" in which he obligates himself to the bank to accept the draft and honor it at maturity. The bank then mails or wires to its agent in New York instructions to buy the exporter's drafts (authority to purchase) under the conditions stipulated by the importer in his application, and to advise the beneficiary thereof. The agent in New York sends a letter (advice of authority to purchase) to *B*, informing him that he is willing to buy the exporter's draft drawn on *A* under the terms of the authority to purchase. When the exporter has put the machinery on board ship, he presents the draft with the documents to the agent and obtains payment, provided the documents comply with the terms of the authority to purchase.

Thus far the operation of the authority to purchase is not different from that of a letter of credit. It differs, however, in the following important aspects. Whereas a letter of credit gives rise to a banker's bill—that is, a bill drawn by an exporter on and accepted by a banking institution—the authority to purchase gives rise to a trade bill, or draft drawn by an exporter or an importer. Since trade bills as a rule sell at a higher discount (lower price) than bank bills, the financing of trade through an authority to purchase is more expensive to the exporter than that through a letter of credit. Second, whereas in the case of a letter of credit the exporter, once the bank has accepted the draft drawn by him, is only secondarily liable (that is, liability would arise only in case the accepting bank should fail), in the case of an authority to purchase, the liability of the exporter remains until the importer has honored the draft, except where the exporter has endorsed the draft with the words "without recourse." If, for example, in the case described above the importer in China fails to pay the draft, the agent in New York would bring suit against the exporter in New York, who is then primarily liable on the trade bill. Authorities to purchase permitting the exporter to endorse with the phrase "without re-

course"—meaning that in case the drawee (importer) fails to pay, the drawer (exporter) cannot be called upon to redeem the draft—are seldom issued.

Authorities to purchase may be revocable or irrevocable. A revocable authority to purchase is one in which the issuing (Far Eastern) bank reserves the right to revoke its instructions to its agent to purchase the drafts. In such case the agent's "advice of authority to purchase" to the exporter contains the clause "subject to cancellation by giving you notice to such effect." If the issuing bank revokes the authority to purchase, the agent merely notifies the exporter that the authority which he has received from his bank abroad to buy the draft has been cancelled. Such revocations as a rule take place when the credit standing of the importer has changed materially in the meantime. An irrevocable authority to purchase is one in which the bank has no right to revoke the authority. This, however, does not mean that the exporter is not liable under the bill. It simply means that when the exporter has presented the draft with the documents, the agent of the foreign bank will not be able to refuse to buy the draft.

Advance on collection drafts. This represents a method of financing foreign trade jointly by the exporter and the exporter's bank. As in the case of a straight collection, the exporter turns over to his bank the shipping documents and the draft for collection, but in this case the bank grants the exporter a loan up to a certain percentage of the face amount of the draft. The percentage depends upon the character and marketability of the shipped merchandise. In case of staple commodities (wheat, wool, rubber) a greater amount will be advanced than in case of merchandise of specialized nature without a ready market. After the draft has been paid by the drawee, the bank retains the amount of the loan, plus interest and collection fees, and credits the balance to the exporter.

Discount of drafts. Where the credit rating of the exporter is high, and especially when he has a line of credit with his bank and is in need of funds, he may discount the draft drawn by him on the importer. In such event the bank credits the account of the exporter with the face amount of the draft less discount and collection charges.

Refinancing bill. The exporter turns over documents and the draft to the bank for collection, and the bank accepts a clean time draft of the exporter drawn on itself. This "refinancing" accept-

ance is a banker's bill and can be sold by the exporter in the open market at a lower rate than the customary discount rate.

Rôle of government in financing foreign trade. During the world-wide economic crisis of the 1930's, and in some instances even before that, the various governments adopted schemes to facilitate the financing of foreign trade. The assistance of the governments was directed to alleviate some of the risks involved in foreign trade, particularly after the institution of foreign exchange restrictions made it highly uncertain whether exporters would receive the proceeds of their sales, and to supply credit on suitable terms. There were two types of government assistance before the war. One is the establishment of special banking institutions for the purpose of aiding in the financing of foreign trade, and the other is the adoption of export insurance plans. The latter have been in existence in a number of countries in Europe but were never introduced in the United States.

The export-import banks established by the United States Government are an example of how governments endeavored to aid the financing of foreign trade through special banks. The United States Government organized in 1934 two export-import banks: the Export-Import Bank of Washington, D. C., and the Second Export-Import Bank of Washington, D. C., for the general purpose of aiding in financing and facilitating the foreign trade of the United States. The capital of the banks was supplied by the United States Government, and the Board of Trustees is made up of high Government officials. The Export-Import Bank was intended primarily to handle transactions with Russia and the Second Bank to facilitate United States trade with Cuba. Owing to a resolution of the Board of Trustees, the Export-Import Bank cannot extend any credits to the Soviet Union until a satisfactory arrangement has been concluded regarding the obligations of the Russian Government to the United States and its citizens. The Export-Import Bank, therefore, did not operate at all and its functions were later changed. The power of the Second Export-Import Bank was officially described as follows: "To do a general banking business; to purchase, sell, negotiate and discount, with or without its endorsement, notes, drafts, bills of exchange, acceptances, including bankers' acceptances, cable transfers, and other evidences of indebtedness and, with the approval of the Secretary of the Treasury, to borrow money and rediscount notes, drafts, bills of exchange, and other evidences of debt; to purchase and sell securities, including

obligations of the United States or any State thereof, but not including the purchase with its funds of any stock in any other corporation; to accept bills or drafts drawn upon it; to issue letters of credit; to purchase and sell coin, bullion, and exchange; to lend money, and to do and to perform the necessary functions permitted by law to be done or performed in conducting such enterprise or business."

The bank thus has wide powers to aid in the financing of foreign trade. The bank, however, is primarily interested in assisting nationals of the United States in the development of sound foreign trade and in any transaction involving direct financing of exporters and importers. In exceptional cases, however, credit to a foreign purchaser will be granted provided the security offered is adequate and the shipper in this country participates in the risk to an extent satisfactory to the bank.

The bank is ready to extend three types of credit: (a) credits of short maturity, running up to 180 days, for the purpose of facilitating the movement of consumers' goods (however, such short-term credits will be granted only when circumstances indicate that the commercial banks cannot handle the business in part or at all); (b) intermediate credits, that is, credits running from six months to a year, where the bank will endeavor to supplement existing credit facilities on terms and conditions which are considered advisable for specific credit purposes; and (c) long-term credits running up to five years. Such credits will be granted for the purpose of financing the exportation of capital goods, and also under special conditions.

By an Act of September 26, 1940, Congress expanded the scope of the Bank's activity by authorizing it to "make loans to any governments, their central banks, or any other acceptable banking institutions and, when guaranteed by any such government, a central bank, or any other acceptable banking institution, to a political subdivision, agency, or national of any such government," for the purpose of aiding "in the development of the resources, the stabilization of the economies, and the orderly marketing of the products of the countries of the Western Hemisphere." Loans for the above purposes may not exceed at any one time the amount of \$500,000,-000.

In 1936 the Second Bank was liquidated, and its functions were assumed by the Export-Import Bank. In the period from its establishment to the end of 1944, the Export-Import Bank, including

the Second Bank, made commitments for a total amount of \$1,196,036,192. Of these commitments, approximately \$396,249,000 were canceled because the applicants either found that they did not need financing or obtained credit from private sources. Actual disbursements to December 31, 1944, amounted to \$483,050,597, of which \$258,538,393 have been repaid. Loans outstanding on December 31, 1944, totaled \$224,512,204, and undisbursed commitments aggregated \$316,737,311.

The September 26, 1940, amendment removed the hitherto existing limitation upon the amount of credits that might be extended to any one country and established \$700,000,000 as the maximum amount of loans or other obligations to it which the Bank may have outstanding at any one time.

In July, 1945, the Bank's loan authority was increased to \$3,500,000,000 in order to enable the United States to finance large exports of capital goods. Of this amount about \$1,000,000,000 will be made available to the Soviet Union.

Supplementary exports procedure. Prior to the outbreak of the war, some countries, notably Germany, which have declared a moratorium on governmental and private external obligations, have developed a so-called supplementary exports procedure. This procedure was possible because the individual debtors, including the government and political subdivisions, were paying the debt service on their external obligations in national currency but were prohibited from transferring it into the currencies of the creditor countries. Thus, holders of external bonds residing in the debtor country could obtain interest on these bonds in the currency of the debtor. As a result of this situation the external bonds, when brought back to Germany and registered there, were selling at a substantially higher price in Germany than in other countries such as the United States. If a German exporter proved to the Foreign Exchange Office that his minimum irreducible price for a certain commodity could not compete in the international markets with prices quoted by exporters of other countries and that he could not sell abroad without incurring a loss, the Foreign Exchange Office permitted the exporter to retain a certain percentage of the foreign exchange proceeds of his exports to be used for purchases abroad of German external bonds. The exporter sold these bonds in Germany at the higher quotation, and the profit on the bond transaction offset the loss on the export.

The following example will illustrate how the supplementary ex-

port procedure assisted the country in increasing its export trade. Let us assume that a German exporter could sell abroad a certain quantity of goods for \$10,000, but that the cost of the goods in Germany was \$12,000. He sold the merchandise for \$10,000 and turned over to the Reichsbank \$5,000, for which he received reichsmarks at the official rate; with the remaining \$5,000 he bought dollar bonds with a par value of \$20,000. He sold these bonds in Germany for the equivalent of about \$8,000. The exporter thus received for the merchandise \$13,000 and made a profit on the transaction. Through this method a number of German exporters were in a position to undersell their international competitors. This, of course, did not entail any loss to Germany, since the loss was borne by the bondholders in the United States, who, on account of the default on the payment of principal and interest, were willing to sell their German bonds at a substantial discount.

During World War II, Government financing of exports, especially by the United States and Canada, reached an unprecedented magnitude. On March 11, 1941, the United States Congress enacted the Lend-Lease Act, which authorized the President to place large quantities of commodities, as well as all kinds of services and facilities, at the disposal of foreign nations which later became members of the United Nations. Unlike the intergovernmental loans of World War I, which represented monetary obligations, lend-lease does not have to be repaid in cash and consequently does not constitute a monetary debt of the recipients. Up to the end of the month of May, 1945, the value of lend-lease extended by the United States Government amounted to \$41,208,000,000, while the United States received reverse lend-lease or aid from the Allies valued at \$5,500,000,000.

The Canadian Government did not adopt a policy of granting aid in the form of lend-lease, but instead made substantial outright gifts to its allies, notably Great Britain. These gifts, known as "mutual aid," were intended to enable the recipients to pay for their large imports from Canada.

Questions for Study and Review

1. How may governmental regulations affect the financing of foreign trade?
2. Name three ways of financing in which the burden is borne by the importer; three ways in which it is borne by the exporter; two, by the importer's bank; three, by the exporter's bank.
3. Define D/P draft; D/A draft; letter of credit.

4. Outline the various steps that are taken in financing through a letter of credit, naming and explaining the paper employed at each step
5. Name various documents that may accompany a bill of exchange
6. Distinguish among (a) revocable and unconfirmed letter, (b) irrevocable and unconfirmed letter, (c) irrevocable and confirmed letter.
7. What is the purpose of an assignable letter of credit; of a revolving credit?
8. Explain how the authority to purchase is used
9. Explain how supplementary exports procedure has been employed by Germany as an aid to export trade.

Problems

1. A Buenos Aires wholesale dealer in radios purchased from a New York firm:

500	radios	trademark	"SOS"
500	"	"	"Electra"
500	"	"	"Carlson"
500	"	"	"RCA"
300	"	"	"GM"

for a total amount of \$50,000. The radios were to be shipped not later than October 10th by direct route and insured with Lloyds in London. Consular invoice and Certificate of Origin are required. Conditions of payment:

\$10,000 on date of shipment;

20,000, 30 days after shipment; and

20,000, 90 days after shipment

available in drafts under a letter of credit

The importer has an account with Bank "A" in Buenos Aires, Bank "A" maintains correspondent relations with Bank "B" in New York City.

(a) Draw a diagram showing in chronological order the various steps taken by the importer, the exporter, and the two banks, beginning with the application for the letter of credit

(b) How much of the \$50,000, if anything, does the New York firm receive when it presents to Bank "B" the bill of lading and the required documents?

(c) Bank "A" refuses to honor the papers on the ground that the bill of lading indicates transshipment in Havana, Cuba. Has Bank "B" any redress? If so, against whom?

(d) The importer in Buenos Aires assumed an obligation of \$50,000 payable at future dates. He has Argentine pesos but no dollars, and he will sell the radios for pesos. The Argentine currency is off the gold standard and fluctuates in terms of dollars. (1) What risk is the importer incurring? (2) Describe the method of eliminating this risk.

2. John Doe, New York City, sold on August 10th to Richard Roe in Atlanta, Georgia, merchandise for \$1,000 payable by a 90-days' acceptance at 4 per cent interest per annum. Draft was presented for acceptance August 13th. Richard Roe has an account with the Fulton National Bank in Atlanta. Fill out the trade acceptance blank in accordance with the above data.

TRADE ACCEPTANCE	No. _____	(CITY OF DRAWER) _____	(DATE) _____ 1922
	To _____	(NAME OF DRAWEE) _____	(ADDRESS OF DR. HERE) _____
	On _____	(DATE OF MATURITY) _____	Pay to the order of _____ (NAME OF PAYEE)
	Dollars (\$ _____)		
	The transaction which gives rise to this instrument is the Purchase of Goods by the Drawer from the Drawee. The Drawee may accept this Bill payable at any Bank, Drawer or Trust Company in the United States which he may designate.		
Accepted at _____	(CITY) _____	(DATE) _____ 1922	} (SIGNATURE OF DRAWER) By _____
Payable at _____	(NAME OF BANK)		
(SIGNATURE OF ACCEPTOR) G. S. Bond			

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M. N.

CHAPTER 24

Financing the Consumer

The average man and credit. One harbinger of the "more abundant life" for the average man has been the ever-widening diffusion of credit. Credit, originally the prerogative of kings and, later, the bondslave of business, has become latterly to an increasing extent the servant of Everyman. And, let it be remembered, the greater part of this development has come since 1910.

The delay in furnishing the average man with credit facilities was due to the lack of adequate machinery to provide consumption credit, the keen demand for credit (and capital) for production, and certain deep-seated social inhibitions and prohibitions, many of which were embodied in the laws covering borrowing and maximum legal interest rates.

Business credit. Borrowing was, theoretically at least, largely for "productive" purposes until very recently, when, as some theorists have expressed it, a scarcity economy was succeeded by a surplus economy. As emphasis on production has given way to emphasis on consumption, the possibilities inherent in consumption credit have come to the fore. In fact, the field of consumer credit was exploited by aggressive business organizations long before its economic soundness was accepted by students of economic theory.

Credit utilized directly for the production of goods normally furnishes its own means of repayment of principal and of a service charge called interest. While the productive character of such a loan is generally admitted, the equally productive nature of credit used to increase sales has only recently been established. It was not denied that installment selling reduced the unit costs and increased the profits of the individual firms utilizing it. The most

serious objection was the social one, which a leading Western banker expressed as follows: "Wage earners are mortgaging future earnings for the gratification of present-day pleasures without thought of the morrow that may bring with it sickness and unemployment." From the economic standpoint, John Stuart Mill held that the consumer's loan was a "detriment to the source of wealth." No serious evaluation of the economic and social effect of utilizing credit to finance consumption was made until Professor Seligman's comprehensive and thorough-going study, *The Economics of Installment Selling*, appeared in 1927. His efforts provided the cloak of respectability and orthodoxy for a business that had always been profitable even though it had received no academic benediction.

Personal credit. At this point, it may be well to consider the points of similarity and distinction between production credit (orthodox) and consumption credit which were adduced by Seligman.

Production credit is, of course, the credit used to facilitate, or make possible, production. There are three different and important concepts of production:¹

1. The physical concept: the creation of wealth; i.e., bringing something into existence—the classical doctrine of Adam Smith
2. The pecuniary concept: the surplus of income over outgo; i.e., profits—the business man's viewpoint
3. The psychological concept: the surplus of utilities over costs, or of results over sacrifices—the social viewpoint.

As was pointed out, consumption credit is *profitable* and thus is productive under the second concept. Its greatest productivity falls under the heading of the third concept. It is productive socially because it helps create the basic satisfactions and welfare which are the real purpose of wealth creation. In addition to gratification of wants, the object financed through consumption credit may be directly productive, as in the case of new clothing which enables a salesman to improve his appearance and increase his sales. It is clear that the orthodox emphasis on form utilities is outmoded in modern society, where psychic utilities are so important.

Economic aspects of consumption finance. A discussion of the economic aspects of consumer finance would appear unnecessary in a textbook on banking. Yet the recent growth in importance of

¹ After Seligman. For complete discussion see Seligman, E. R. A., *The Economics of Installment Selling* (Volume 1), Harper and Brothers, New York, 1927.

this type of credit and the prejudice which its development as a field of finance encountered, particularly in commercial banking circles, make a detailed exposition necessary.

As indicated earlier, the current emphasis is on marketing. Mass distribution is the order of the day. But mass distribution necessitates mass financing. Financing the consumer is not an empty phrase; it is an economic necessity. The wide distribution of automobiles, radios, refrigerators, oil burners, and a thousand and one other modern "conveniences" bears eloquent testimony to the latter statement. It is generally admitted that installment selling by the producer increases volume and lowers costs and prices; the latter still further increases volume; and so on in the American tradition of mass production.

On the debit side, installment finance undoubtedly increases the amplitude of the swings of the business cycle. By advancing the time of purchase, it accents the boom phase of the business cycle, as people will take advantage of this credit to the fullest extent only when the outlook is rosy. Contrariwise, in the downward swing of the cycle, purchasers must liquidate previous "temperamental buying," as the French put it, out of diminishing income. Furthermore, some installment purchasers develop a fear of debt and resolve to buy only on a cash basis. Not only does the demand for the credit diminish, but sellers often find themselves financially unable to offer the liberal installment credit terms which characterized their previous operations. This decline would be greater were it not offset by the increased liberality of well-financed firms which offer easy credit terms as bait to overcome increased sales resistance. But whatever the underlying reasons, the volume of consumer credit falls off sharply and, undoubtedly, deepens and prolongs the depression phase of the business cycle.

From a social and political standpoint, the discontent caused by personal debt in "hard times" is the most serious shortcoming of consumption finance. Demands for relief from debt, when it becomes difficult or inconvenient to pay, are to be expected; they are a natural by-product of depression. But the great increase in debtors who vote, caused by the wide utilization of consumption credit, is a potential and too little realized danger to democratic government.

The social implications of installment *selling* (which is what we have, largely), as opposed to installment *buying* (which is what we should have), should not be overlooked. Numerous laws have been

passed to prevent flagrant exploitation of the users of such credit, on the ground that they are economically unable to protect themselves. But serious abuses are prevalent even with respect to such obvious matters as interest rates.

Legal aspects of consumption finance. Although consumption loans have been made since the beginning of recorded history, the problem of the proper interest rate has not yet been solved. In some respects, it is further from a solution than it was in 2300 B.C., when Manu, the great lawgiver, established a rate of two per cent per month in India. Since that time, Hammurabi, Nebuchadnezzar, Artaxerxes, Ptolemy, Roman emperors, kings, queens, and legislatures in the temporal sphere, and prophets, Popes, and Holy Writ in the ecclesiastical sphere, have promulgated standards and established limitations—centuries of effort, yet a completely satisfactory solution has not been found.

The real problem centers on the proper rates to be charged on loans to needy or necessitous borrowers. Obviously, the necessitous borrower does not have an equality of bargaining power with the lender. To remedy this inequality, efforts have been made since the earliest times to protect such borrowers by statutory provisions setting maximum interest rates. These laws or usury statutes set rates which protected business men and large borrowers, but necessitous borrowers received little protection from them. The maximum rates were usually fixed at a figure which, though it looked high to business men, did not allow a reasonable profit on the small loans typical of this field. Legitimate capital went elsewhere, and "loan sharks," expert in evading the law, met the demand of the consumer.

Operating illegitimately, the "loan sharks" were thoroughly unscrupulous and ruthless. They bled their victims white with interest rates from twenty to three hundred times the maximum legal rate. Social condemnation and criminal prosecution failed to stop these evasions of the usury statute. For every loan shark sent to the penitentiary, countless others continued their operations under the cloak of obscurity and anonymity. As late as 1935 in New York City, "loan sharks" operated in the very court buildings where their less fortunate brothers were being tried and convicted. Conservative estimates at that time placed the annual volume of illegitimate lending in New York State alone at \$45,000,000. While, owing to the growth of licensed lenders, this volume has declined considerably since then, it is still shockingly large. In fact, ex-

perience demonstrates the impossibility of completely eliminating the loan shark, particularly in large urban centers.

In 1907, organized charity in New York City requested the newly chartered Russell Sage Foundation to investigate the connection between "loan sharks" and poverty. The Foundation, having been chartered to aid in the betterment of social and living conditions in the United States, willingly undertook the survey, and the findings disclosed such a serious social problem that the Foundation organized the Division of Remedial Loans in October, 1910. Thanks to the efforts of the Foundation, the public was eventually convinced that a separate small loan field was a necessity. To meet the needs of this field, the Foundation proposed that special legislation be drafted to regulate loans for necessitous purposes at rates higher than those permitted by existing usury statutes. A model law, known as the Uniform Small Loan Act was thereupon drafted and, through vigorous campaigning, has since been adopted by 32 states,² while the twelve other states have either passed small loan laws of their own which differed materially from the Uniform Act or have no such legislation whatever.

The Uniform Small Loan Act required lenders to be licensed and permitted a flat rate of $3\frac{1}{2}$ per cent per month on unpaid balances, but it prohibited all other fees and charges. Furthermore, the maximum amount which could be loaned at these rates was placed at \$300. The law also provided for adequate loan records open to State inspection, for proper documents to define clearly the obligation assumed by the borrower, and for forfeiture of license to the State for departures from the law. The licensed small loan companies are known as personal finance companies and are treated in a later section of this chapter.

It should be clearly understood that the Uniform Small Loan Act does not apply to the other lending agencies in the field of consumer finance. These other agencies likewise find it necessary to charge higher rates than the so-called legal rates. Pawnbrokers, credit unions, and Morris Plan lenders each have specific statutes governing their operations and granting them immunity from the usury statutes as long as stipulated interest maximums are observed. The installment finance companies are on less certain ground, but so far their right to exist has not been successfully challenged legally.

In general, all consumption finance agencies exist by virtue of

² 1945--with certain differences as to maximum rates, etc

special permissive and regulatory legislation—that is, permission to charge in excess of the usury statute rate on their loans, with consequent regulation and supervision to insure the attainment of the real purposes of the relaxation of the statute and to avoid abuses. Hundreds of court decisions have established the legal soundness of such legislation. The Supreme Court of the United States, as well as various State courts of last resort, have sustained the constitutionality of the small loan and similar laws. The legal right of a State to grant exemption from the usury laws to such specialized types of loans is so well established that, in general, it can be taken for granted.

General survey of personal credit institutions. The unconscionable rates charged by the “loan sharks” indicate the intensity of the demand for personal credit. The huge volume of their loans at virtually prohibitive rates gives an idea of the economic need for such credit. The potential size of this field is indicated by the fact that probably less than 10 per cent of the American people are in a position to command credit at a commercial bank. The credit needs of the remaining 90 per cent must be met by other agencies.

Social solicitude for the needy group of small borrowers has caused efforts to meet their needs on a charitable or at least semi-philanthropic basis. In general, such efforts have failed; at best, they have been woefully inadequate. The borrowers themselves seem to prefer that their credit needs be handled on a business rather than a charitable basis.

Remedial loan societies. These are semi-philanthropic (limited-dividend) agencies that still survive in this field. They may be described as modified pawnshops operating at rates lower than those of the regular pawnbrokers. They are not very important; there are less than 30 in the entire country. One of these, the Provident Loan Society of New York, extends approximately two-thirds of the total volume of all remedial loans.

Pawnbrokers. The importance of the pawnbroker as a source of small cash loans is not generally appreciated. It is estimated that pawnbrokers lend around \$165,000,000 a year on the security of pledged personal property. Rates vary from 24 per cent to 120 per cent per annum, 36 per cent being the most typical rate. Pawnbroking is usually done in conjunction with small-scale retail merchandising operations in unredeemed pledges and similar goods. It is hard to realize that pawnbrokers make nearly 30,000,000 loans each year, but this is the case, as their average loan is less than \$7.

Numerically, their loans greatly exceed those of the commercial banks.

The regulation of the operations of pawnbrokers with respect to rates and sale of unredeemed pledges is in a chaotic condition. Regulation varies widely, and most States leave the problem to local authorities.

"Industrial" banks. The Morris Plan banks and institutions doing business along similar lines comprise the industrial banks. Starting in Norfolk, Virginia, in 1910, these lending institutions have developed until they now have more than 678 lending offices and make loans of some \$600,000,000 annually. The name *Morris Plan* epitomizes this type of banking. Arthur J. Morris was the original driving force behind the growth of the Morris Plan organizations, although other organizations soon developed along similar lines. A special "plan" of lending is the essence of all these institutions, whether or not they use the Morris Plan name.

This "plan," much of which is copyrighted, involves a contractual avoidance of the usury laws by the simple device of selling installment "investment certificates" to borrowers. (Thus, technically, at least, the advance of money is not a loan.) This investment certificate is then pledged with the company to secure the contract. Regular payments are made on this certificate over the agreed period. When fully paid, it is cancelled against the loan contract.

In states, such as New York, where the Morris Plan operates as a bank, investment certificates are no longer used; instead, a deposit account is opened and hypothecated to secure the advance. By agreement, regular deposits are made, and at the end of the loan period the loan is paid by a charge against this account.

Morris Plan companies operate under special legislation in 18 States, including New York. In 13 other states they operate as ordinary business corporations without specific legislative authorization. In such cases, the general banking laws may, or may not, apply; hence they are placed on an uncertain legal basis.

The Morris "plan" introduced the "co-maker" idea into the small loan field. Borrowers are required to furnish the written guaranty of two or more responsible persons that the contract will be faithfully performed. These guarantors of the credit of the borrower, to preserve the contract fiction, are called "co-makers." Legally, they can be held for principal and interest due on the installment contract.

These lenders pride themselves on the wide variety of loan plans

which they offer to different types of borrowers—more than fifty different types of loans being currently available. Thus, co-makers, originally the very essence of Morris Plan lending, are not generally required when collateral is put up to secure the loan. Many other variations from the standard pattern have been developed into special loan plans for competitive purposes.

Generally, a charge of 6 to 8 per cent of the entire loan is deducted in advance. An additional service fee is likewise deducted in advance. This fee, which is intended to cover the investigation of the borrower, is not uniform. Ordinarily, it is 2 per cent on a loan of \$100 and a lower percentage for larger amounts. The borrower, who thinks he is paying 6 per cent, is really, owing to the service charge, weekly repayments, and discount features, paying on a \$100 loan an annual rate of nearly 18 per cent for the time he actually has the use of the money.

Personal loan departments of banks. The personal loan departments of commercial banks are merely modifications of the plan just described. Co-makers are generally required, and several of the other features of the plan have been copied. While higher than 6 per cent, the actual per annum interest rates are considerably lower than those of the Morris Plan, as most of the banks do not charge an investigation fee. A special feature of most personal-loan department plans is the requirement of insurance on the life of the borrower to protect the co-makers in case of death.

The lower interest rates, of recent years, on the conventional types of loans and investments have furnished a tremendous incentive for the commercial banks to go after this business. The negligible bad debt losses on monthly-repayment small loans looked particularly attractive to the commercial banks after their depression experience with gilt-edge borrowers. It is not surprising, therefore, to find a great increase in the activity of commercial banks in the small loan field. It is anticipated that this trend will continue, the increasing competition forcing lower interest rates with resultant social benefit.

In addition to small loans, industrial banks and the personal loan departments usually handle other forms of consumer financing, such as installment paper covering the sale of household utilities, automobiles, and similar items.

The personal finance companies. The small loan companies, licensed under the Uniform Small Loan Act, are called **personal**

finance companies Regulation of their activities is secured by permitting only licensed lenders to receive the benefits and protection of the Act. Non-licensed lenders charging more than the legal rate of interest are precluded from bringing action in the courts to recover interest, and in some States, New York for example, both principal and interest are cancelled. Furthermore, if the usurious rate is very much in excess of the maximum legal rate, the lender faces criminal prosecution as a "loan shark."

As contrasted with the "plan" lenders, less than 10 per cent of the loans of the personal finance companies are made on the security of co-makers. About 90 per cent of these loans are secured by chattel mortgages on the furniture and household possessions of the borrower. These mortgages are taken chiefly for the moral effect, as they are rarely foreclosed. The better companies foreclose only in cases of bad faith, as they have found that the expenses involved and the ill-will incurred exceed the value of the used chattels. Furthermore, from the standpoint of public relations, they do not care to assume the responsibility for breaking up a home by seizing the furniture.

Their regular method of charging interest on unpaid balances lends itself to an adjustment of difficult situations by extension of the payment dates. It is a plain matter of good business for them to nurse along honest debtors, who because of unemployment, sickness, or other causes are temporarily unable to meet the loan payments. In serious situations, they often go further and waive interest charges and payments on principal, since most of the companies realize that they are dealing with a social as well as a financial problem.

The personal finance companies are called "the poor man's banks," but they differ widely from the commercial banks, which lend credit by means of book entries. The personal finance companies hand out *cash* over the window—they lend money, not credit. No credit expansion is possible. Every dollar they lend must be from capital, as they are not permitted to accept deposits. Their annual loan volume ranges from $1\frac{1}{2}$ to 2 times their capital, whereas the commercial banks' loans and investments range from 5 to 15 times their capital funds.

The foregoing characteristics of this type of banking must be kept in mind in any consideration of the rate charged. The Uniform Small Loan Act permits licensees, in most States, to charge a maxi-

mum flat rate of $3\frac{1}{2}$ per cent per month on the unpaid balance. This means an annual rate of a little more than 42 per cent, which, offhand, certainly seems high.

It is unfortunate that the term "interest" is used in the Uniform Act to apply to this charge, as, from the lender's standpoint, the interest (charge on the capital) is the smallest cost element involved in the transaction. The considerable expense involved in keeping the detailed record of the small weekly or monthly payments, the costs of investigation, and the costs of collection are the big expense items. Bad debts are ordinarily a minor factor in costs, as the companies find it advisable from the standpoint of morale to make continuous and exhaustive collection efforts. Except in cases where the possibility of the break-up of a home or the necessity of charity makes cancellation of the debt advisable, they do not hesitate to spend considerably more than the loan balance to prevent borrowers from developing careless credit habits. Even though it would often be cheaper to charge off the notes and forget about them, the companies realize that such a shortsighted policy would quickly demoralize the small loan field. Heavy collection expenses are thus a necessary cost of conducting the small loan business. These various costs, which are to a great extent peculiar to the small loan field, are lumped together and called "interest," when they really are chiefly special charges due to the nature of the business. The personal finance companies find it necessary to carry on a continuous educational campaign to offset public criticism of their "interest" rates.

Approaching these charges from another angle, the personal finance companies are retailers of cash-credit. Their average loan is under \$150, yet their investigation and collection expenses, since the real basis of their lending is *character*, must necessarily be several times greater than on a \$10,000 commercial bank loan. The small size of the *average* loan makes the expenses bulk very high on a percentage basis.

As was indicated earlier, these companies can lend only their own capital, and their capital costs are quite high, as they are, comparatively, a new industry. Further, a large part of the public, through lack of understanding, has tended to look on their operations with disfavor and has discriminated against their securities. The larger companies, however, during the last decade, have been able to go directly to the capital markets to raise funds. Their enlightened public relations policies are gradually overcoming preju-

dices and reducing capital costs. Competition will pass this on to the borrower in the form of lower rates.

While they have been caustically referred to as the "42 per cent bankers," the plain fact is that only the companies with superior management have been able to pay their high capital and other costs and make a profit. The high type of management required for success has caused the formation of several chains of these lenders through mergers, consolidations, and management contracts. Application of the chain-store idea permits a central management group to devote itself exclusively to a solution of the manifold financial and human problems involved in the successful operation of the small loan business.

By and large, management in this field has been very progressive and forward-looking. Personal finance companies adopted a well-formulated code of ethics long before the NRA fiasco. They have continually emphasized the human, the social, side of the problems involved in their operations. To maintain standards, they have organized state associations and a national trade association called the American Association of Personal Finance Companies.

In the whole country, there are more than 4,500 licensees under the Uniform Small Loan and similar acts. Their annual loan volume is more than \$900,000,000, and they lend to nearly 4,000,000 borrowers each year. The poor man's banking system is indeed an important "banking system" within the banking system. With the growth of the corporate system of doing business, which reduces the number of individual owners eligible for commercial bank credit, and with the increasing tendency of commercial banks to demand collateral, more and more present-day bank customers will have to turn elsewhere for loans. While it is impossible to forecast the extent to which commercial banks will meet this trend by opening personal loan departments, if the past is any criterion, the natural conservatism of the bankers will prevent them from fully meeting the demand.

In any event, the personal finance business has a most promising future, especially if it is found possible to reduce charges with greater volume and lower capital costs.

Sales finance companies. The sales finance company is by far the largest agency of consumer credit. Such companies finance nearly 50 per cent of the total dollar volume of installment selling, the remainder being carried by Morris Plan companies, by personal loan departments of banks, and directly by the sellers. Finance

companies confine their operations to the field of partial payment sales; they finance only the merchandise needs of customers for *approved* goods, as opposed to the other institutions treated in this chapter, which advance money to meet the general credit needs of borrowers. Thus, installment finance companies are more of an adjunct to merchandising than functionally distinct banking institutions. They are tied up far more closely to the movement of goods than to the *credit* needs of individuals.

Originally, these companies financed only the retail sale of certain kinds of consumer goods. They soon broadened their field of operation by financing wholesalers also. This broadening continued, until lately they have engaged in financing the sale of different kinds of producers' goods (capital goods), such as machinery, retail store equipment, and similar things. As this last phase of their business has become quite important, they can no longer be considered as exclusively consumer finance agencies.

The security for the advance (balance above cash down-payment) to the *seller* is the assignment of the conditional sales contract to the finance company, plus a contractual arrangement whereby the seller takes over all repossessed goods and reimburses the lender on an agreed basis. This is called the *recourse* plan. It ties up the seller's credit on a contingent basis, at least, because of this recourse feature. The credit burden is not unequivocally borne by the purchaser, as it should be and is in the other methods of financing in this field. Other variations include a non-recourse plan, the repurchase agreement plan, and the lease agreement.

Recent reductions bring the charges for this financing on new automobiles down to a range of 13 per cent to 20 per cent per annum on the credit used. Before that, rates were higher. Considering the size of the down payment, the protection of the conditional sales contract or lease agreement, coupled with the insurance required by the companies and the recourse features, it is apparent that these rates have been unconscionably high. The drastic rate reductions of the larger companies demonstrate the truth of the foregoing statement.

Automobile, both new and used, account for about one-half of all installment paper. The total volume of all installment financing, including the paper carried by sellers themselves, ranges from four to six billion dollars a year, a figure which is all the more amazing when it is realized that installment selling was inconsequential in volume until after the First World War.

Although the term "finance company" brings to the minds of most people the names of three or four huge companies which tend to dominate the field, actually there are in the United States more than 2,000 companies engaged in this type of financing.

Coöperative credit institutions. Americans, individualists though they are, have accepted the coöperative idea in the credit union much more readily than in any other field. Nonetheless, the credit unions are as yet relatively unimportant. They began in Massachusetts in 1910. But powerful foundations, skilful propaganda, direct aid of many States, and, finally, the assistance and organizing efforts of the Federal government have all been of little avail—the credit unions just have not caught on. The credit union idea of self-help is a beautiful principle in theory; in practice, it doesn't seem to work out in America.

The American credit union stems from such foreign coöperative credit institutions as the Raiffeisen and Schulze-Delitzsch organizations in Germany and the famous French-Canadian credit union, Caisse Levis, but it has a distinctly American form. It is a membership corporation which sells stock to members in amounts as low as 25 cents a week and, in turn, loans the pooled funds *only to members*, all profits being shared coöperatively. Most of these loans are solely on a "character" basis, although some are made on the co-maker plan.

Rates charged vary from 5 per cent to 20 per cent per annum on unpaid balances. Special legislation in most States exempts credit unions from the usury statute. Since they rarely maintain regular offices, but meet instead at stated intervals in halls and clubrooms, and the officers usually serve without pay except for a nominal amount for the secretary, they are able to pay substantial dividends with these rates.

Credit unions can be successfully operated only in closely knit, cohesive, natural groups of employees with low labor turnover. As a practical matter, a credit union must be confined to the limited group of employees of a particular factory or a highly localized industrial development. Such is the industrial type of credit union.

There are a few agricultural-type credit unions, but, in general, their growth has been limited to the paternalistic efforts of certain States to help rural borrowers. Agricultural credit unions usually languish or expire when the State loses interest.

A special type of credit union known as an *axia* is found among the foreign-born, especially in New York City. Ordinarily the *axia*

is a voluntary *unincorporated* form of credit union, limited to a single racial group. A few are organized as ordinary business corporations. Little is known about them, since they do not take out charters under the Credit Union Act and thus make no reports to State authorities.

The total loans of credit unions of all types probably approach 175 million dollars a year. Even that figure may be too high.

Miscellaneous consumer credit agencies. There are several other agencies that extend credit to small borrowers who do not have access to commercial bank credit. These agencies also lend to borrowers who do have credit standing at regular banks.

Thus, while a considerable part of the enormous policy loans of insurance companies goes to those able to command bank credit, nearly a billion dollars of the total of such loans has undoubtedly been borrowed by poor people who would otherwise have been forced to turn to other agencies of consumer finance.

Employer loan funds and employer-employee mutual loan funds are available to employees in many companies. These are usually patronized only in emergencies or as a last resort. Both employer and employee frown on placing reliance on these funds for day-to-day needs.

Labor banks, regularly incorporated commercial banks, organized to favor and extend special loan accommodations to particular unions or laboring men in general, have been uniformly unsuccessful. No purpose would be served by a discussion of them.

Summary of sources of consumer credit. The accompanying table gives the many sources of credit available to small borrowers, and the security required.

CONSUMER CASH-CREDIT AGENCIES CLASSIFIED ACCORDING TO NATURE OF SECURITY³

<i>Security for the Loan</i>	<i>Lending Agency</i>
1. Tangible Property	
a. Deposited with the Lender	Pawnbroker Remedial Loan Societies Retailers' Open Accounts Installment Finance Companies
b. Retained by the Borrower	
2. Shares or Certificates	Building and Loan Associations Veterans' Bureau

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CONSUMER CASH-CREDIT AGENCIES CLASSIFIED
ACCORDING TO NATURE OF SECURITY (*Cont.*)

<i>Security for the Loan</i>	<i>Lending Agency</i>
3. Cash	
a Cash Surrender Value of Life Policies	Life Insurance Companies
b Savings or Thrift Accounts	Savings Banks and Savings Departments of Other Banks
4 Endorsements or Co-signatures	Industrial Banks (Morris Plan and Others) Personal Loan Departments of Banks Other Small Loans by Banks
5. Mixed Shares or Endorsements, or Both	Credit Unions Axias Mutual Benefit Associations Employer-Employee Funds
6. Chattel Mortgage, Wage Assignment, Special Emphasis on Family Stability	Personal Finance Companies
7. Personal Character of the Borrower	Employer Loan Funds Student Loan Funds Intra-family and Inter-individual Loans
8. Unsecured Notes, Special Emphasis on Wage Assignments—Hold-Back Salaries	Uncensored Lenders of All Kinds

That there is a plethora of such agencies is plain. Yet the security required severely limits the utilization of these different sources. Life insurance policies with cash surrender value are required for loans from the insurance company; only members can borrow from credit unions; co-makers are required as security by certain agencies, and so on. The surplusage is more apparent than real. The average man does not find it easy to borrow, although he can arrange for limited credit if he tries hard enough.

Questions for Study and Review

1. Why was the right of the average man to have credit denied until very recently?
2. Demonstrate the "productive nature of credit used to increase sales."
3. Give the points of similarity and distinction between production credit and consumption credit.

4. What are the social, political, and economic dangers of installment finance?
5. Why is it impossible to determine the proper interest rate in the field of consumption finance?
6. Specifically, how did the Russell Sage Foundation propose to put the "loan shark" out of business?
7. What is the real "small loan problem"?
8. Differentiate between the "industrial" banks and the personal finance companies on the basis of (1) method of operation, (2) rates charged, and (3) volume of loans.
9. Discuss the companies which operate under the Uniform Small Loan Act.
10. Describe the sales finance companies, emphasizing their method of lending, rates, and importance in the field of consumer credit.
11. Summarize the reasons for the failure of credit unions to expand more rapidly in America.

Problems

1. Calculate the total interest and other charges on the following loan: \$100, received by the borrower and repaid in equal monthly installments over a 12-month period
 - (a) From a personal finance company which charges $3\frac{1}{2}\%$ per month on the unpaid balance.
 - (b) From a Morris Plan bank which charges 6% interest and 2% investigation fee and discounts the charge.
 - (c) From the personal loan department of a bank which advertises that it charges 6% on the loan, allows 2% interest on deposits made, and insures the life of the borrower (Insurance charge \$0.46)
2. Calculate the actual percentage rate of charges paid on the purchase of a new car with a delivered cash price of \$700, a down payment of $33\frac{1}{3}\%$, the balance in 12 equal monthly payments, insurance charges \$38.63, and financing charges 6%.

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CHAPTER 25

Savings Banking

Nature of savings banking. The two major divisions of the banking business are commonly designated as commercial and investment. Commercial banking traditionally was devoted primarily to the extension of short-term credits to finance self-liquidating business transactions. The preceding pages have shown, however, that commercial banks perform many services in addition to this primary function, just as the modern drugstore is engaged in dispensing many things besides drugs.

Savings banking falls within the second major banking category—that of investment banking, which is devoted to making long-term extensions of credit.

Commercial banks have, from the early days of our banking history, received savings deposits. Special institutions, called savings banks, have also performed this function in competition with them.

Savings banks, like commercial banks, receive deposits. All of the deposits made in a savings bank, however, are time deposits. The funds thus received are then invested, for the most part, in longer-term commitments, in order to obtain a higher rate of return than is normally available on short-term liquid loans. This type of banking involves many operating and policy problems that are quite different from those which confront commercial banks. In effect, a savings bank performs the investment function for a number of individuals, while assuring them of the ability to withdraw their funds without impairment of principal whenever they wish after reasonable notice and in accordance with the conditions under which the bank receives such deposits.

Savings deposits. Savings deposits constitute a more restricted category than time deposits. Any deposit which is not payable on demand falls within the broad classification of time deposits. However, a large portion of time deposits consists of funds, belonging to corporations and wealthy individuals, that are not required immediately but may be drawn out at any time as circumstances dictate, and which are given the time deposit classification so that interest will be paid on them until such time as they are needed. Savings deposits, on the other hand, represent those time deposits which are not likely to be needed by the depositor for a fairly protracted or indefinite period. At the same time, the owners of these funds have the right to withdraw them by giving to the bank advance notice, which ranges from 30 to 90 days in the various states.

For members of the Federal Reserve System, the definition of savings deposits is fixed by law. Regulation Q of the Board of Governors of the Federal Reserve System, which covers this point, states:

The term "savings deposit" means a deposit, evidenced by a passbook, consisting of funds (I) deposited to the credit of one or more individuals, or of a corporation, association or other organization operated primarily for religious, philanthropic, charitable, educational, fraternal, or other similar purposes and not operated for profit, or (II) in which the entire beneficial interest is held by one or more individuals or by such a corporation, association, or other organization, and in respect to which deposit—

(1) The depositor is required, or may at any time be required, by the bank to give notice in writing of an intended withdrawal not less than 30 days before such withdrawal is made;

(2) Withdrawals are permitted in only two ways, either (I) upon presentation of the passbook, through payment to the person presenting the passbook, or (II) without presentation of the passbook, through payment to the depositor himself but not to any other person whether or not acting for the depositor.

It is thus seen that business corporation deposits may not be classified as "savings" deposits, regardless of the conditions which govern their withdrawal.

Effective January 1, 1936, the Board of Governors fixed $2\frac{1}{2}$ per cent as the maximum rate of interest that member banks could pay on savings deposits, while the maximum was made 2 per cent on time deposits payable after 90 days, and 1 per cent on time deposits payable on written notice of less than 90 days. These maximum interest rates for savings deposits are subject to change by the Board. The Federal Deposit Insurance Corporation fixed similar top interest rates for nonmember insured banks. Some state banking authorities have set lower maximum rates, such as 1 per

cent in New Jersey established July 1, 1939. Where a lower rate has thus been set by State authorities, national banks within the state are subject to them also.

The business of receiving savings deposits is now conducted by four different types of institutions.

(1) *Commercial banks* receive savings deposits. When received, the deposits are not segregated from the other assets of the institution, but are commingled and placed in loans and investments along with other funds. However, the larger the proportion of its savings deposits, the freer the institution normally feels to place its funds in longer-term assets.

(2) The business of savings banking is conducted in a few states by *stock savings banks*. These institutions, which are organized much like state commercial banks, have in most cases become ordinary state banks and trust companies during recent years in order to broaden their banking activities.

(3) The most important of the specialized savings banking institutions in the United States are the *mutual savings banks*. Their organization and operation are described in the following section of this chapter.

(4) The fourth classification of savings banking institutions is the *Postal Savings System*, which is conducted by the Federal Government through local post offices. Established in 1910, the system furnishes an agency in which individuals may deposit up to \$2,500 each and receive interest at the rate of 2 per cent. The banking difficulties of the early 'thirties caused a sharp rise in deposits of the Postal Savings System. In 1933 they surpassed a billion dollars. There has been some agitation to abolish the system on the ground that the Federal Deposit Insurance Corporation gives so much protection to the small bank depositor that there is no longer any reason for the Federal Government to participate in the savings banking business in order to reassure the timid and to discourage hoarding. The contention that the existence of the Postal Savings System would avoid a good deal of money hoarding by those persons who, for one reason or another, would not place their savings in a private banking institution was chiefly responsible for its organization.

A large volume of funds that would otherwise have gone into savings deposits is now placed in United States Savings bonds ("baby bonds"), which are sold by the Treasury on a discount basis, and can be redeemed on demand after 60 days from purchase date.

The relative proportion of the nation's savings deposits held by each of the various classes of banking institutions on June 30, 1942, was as follows:¹

SAVINGS DEPOSITS IN THE UNITED STATES, JUNE 30, 1942

<i>Institutions</i>	<i>Amount</i>	<i>Number of Depositors</i>
National banks	\$ 7,842,000,000	16,053,000
State banks and trust companies	7,294,000,000	14,923,000
Mutual savings banks	10,351,000,000	14,441,000
Total	\$25,487,000,000	45,417,000

In addition, the Postal Savings System held \$1,315,523,000 for almost three million depositors on that date. It will be noted that the commercial banks (national banks, state banks, and trust companies) held aggregate savings deposits of over 15 billion dollars, received from over 30 million depositors.

Mutual savings banks. The mutual savings banks, which have been in existence in the United States for more than a hundred years, are the most important institutions devoted entirely to savings banking. They were first established, characteristically enough, in Scotland, but have enjoyed their greatest development in the United States. They differ from ordinary banking institutions in several respects. They receive only saving deposits; they are eleemosynary in character; they are subject to far more rigid restrictions in their operation.

Their capital is not provided by stockholders, the incorporators providing only a small initial guaranty and expense fund that may be returned to them out of subsequent earnings under stated conditions. Mutual savings banks are not conducted to make a profit for their owners. Rather, they are designed primarily to promote and foster thrift among the masses of the population. After expenses are paid, any returns that the banks may have obtained are either distributed among the depositors or are added to a surplus account, which gives a margin of safety for those who do business with these institutions.

While, unlike commercial banks, mutual savings banks are not conducted for profit but rather to further the welfare of the community, they are not subsidized by the government. They furnish an agency in which depositors pool their funds for mutual advantage, protected by a number of safeguards provided by state law.

¹ Report of the Comptroller of the Currency, 1942.

Sound savings banking requires that the institutions be conducted carefully and conservatively. Hence, a second point of difference from commercial banks is the imposition of many legal restrictions on the operation of these institutions, to safeguard the savings of people of small means.

Because of the absence of the profit motive, mutual savings banks are found almost entirely in the older sections of the country. Furthermore, relatively few of them have been established in recent decades. The bulk of them are found in New England, New York, New Jersey, and Pennsylvania. On December 30, 1944, there were in the United States 543 mutual savings banks with deposits of \$13,376,000,000; well over 90 per cent, in number and deposits of these banks, were located in the states mentioned above.

Mutual savings bank operation. The state laws under which mutual savings banks operate generally specify a limit to the size of the deposits which these banks may receive. This precaution is motivated by two considerations.

In the first place, the legislation properly seeks to limit the size of the deposit so that only true savings accounts will be received—not liquid funds for which individuals or corporations have no immediate use. It is assumed that, when a relatively low limit is set on mutual savings bank deposits, such funds will not be diverted from commercial banks when they properly belong there. Thus New York State limits to \$7,500 the amount of deposits which a savings bank may accept from one person. Of course, this restriction can be circumvented to some extent by individuals who establish accounts in the names of different members of the same family, or who make deposits in a number of mutual institutions.

The second reason for limiting the size of savings bank deposits is to safeguard the institution against a sudden, sharp contraction of its deposits. At any one time a savings bank will naturally have a number of new deposits, while a number of existing depositors will be drawing down or closing out their accounts. By limiting the size of the individual deposit, the danger of sudden, heavy withdrawals is reduced, and a more even flow of funds into and out of the bank is assured.

Practically all savings bank deposits are represented by passbooks; withdrawals are not permitted by check, and the actual presentation of passbooks is required in order to take out funds. Also, when a depositor withdraws his funds before the termination of a quarterly interest period, he does not receive interest for the

elapsed portion of that period. Thus, an added incentive is given depositors to leave their funds with the institution, rather than to effect numerous deposits and withdrawals of the type which a commercial bank regularly expects.

Investments of savings banks. Having taken all of these precautions to avoid erratic changes in the volume of its deposits, the mutual savings bank is in position to invest its funds with less regard for liquidity, or even marketability, than the commercial bank. Furthermore, state laws set up restrictions to assure that only high grade investments will be acquired. Unfortunately, such legal restrictions have imparted to savings bank investments a lack of flexibility, the results of which have not always been commendable. Savings banks have been largely restricted to real estate mortgages, government bonds, railroad obligations, and public utility bonds. A number of sound groups of bonds outside of these fields have been closed to them. State legislatures have been reluctant to liberalize savings bank investment laws, despite growing sentiment in favor of such revision, on the ground that such legislation might jeopardize the savings of the low-income classes of the population.

When an investment ceases to conform with the legal requirements in a given state, savings banks may not purchase it. However, where they already hold such an investment, they may have a "reasonable time" in which to dispose of it. The discretion of banking superintendents may extend such a period to cover years.

The New York law, regarded by many as the most modern of the savings bank investment statutes, authorizes these institutions to buy bonds of the United States Government, of states and municipalities meeting certain standards, and of railroads and of public utility operating companies which can measure up to stated qualifications. However, it is typical of the difficulty of legislating in advance to assure sound investment results that the New York State legislature suspended its criteria applicable to eligible railroad investments for savings banks in 1931, to prevent a wholesale decimation of this legal list. In 1938, less severe requirements were applied to new investments in railway bonds, to reflect the less favorable conditions under which this industry operates. This experience demonstrated the need for more flexible investment restrictions which will not have to be suspended during depression periods.

The New York State legislature in 1938 provided for the first time that additions could be made to the legal investment list of

issues not specified in the statutory investment provisions by the State Banking Board, upon the recommendation of at least 20 savings banks in the State or the Savings Banks Trust Company. Under this provision of the law, several industrial bond issues of the highest grade have been added to the legal list for the first time, and a degree of flexibility has thus been injected into the determination of bonds suitable for investment by these institutions.

In addition, the New York State law authorizes mutual savings banks to make first mortgage loans on real estate, within the state, up to 60 per cent of the appraised value of improved, and 40 per cent of the appraised value of unimproved, property. In practice, savings banks have tended to put the larger portion of their funds into real estate mortgage loans because of the relatively high yields thus obtained.

Savings banks, like other financial institutions, have greatly expanded their holdings of United States Government obligations in recent years. They have favored the longer-term issues, since they need the higher yield and are so much less concerned with liquidity than commercial banks.

The 548 mutual savings banks in the United States, on December 31, 1942, had total loans and investments of \$10,378,000,000, distributed as follows:

Real estate mortgage loans	.. . .	\$4,811,000,000
All other loans	.. . .	92,000,000
U. S. Government bonds	.. . .	3,449,000,000
Government guaranteed bonds	.... . .	251,000,000
Federal Land Bank bonds, etc	. . . .	5,000,000
State, county, and municipal bonds	. . . .	438,000,000
Railroad bonds	..... .	550,000,000
Public utility bonds	. . . . .	435,000,000
Industrial bonds	. . . . .	116,000,000
Corporation stocks	. . . . .	171,000,000
Foreign securities	.... . .	49,000,000

From the above discussion, it might be noted that mutual savings banks hold primarily long-term and to a considerable extent non-marketable assets. This situation places them in a relatively vulnerable position if large withdrawals of deposits should occur. However, knowing that they were subject to a larger measure of regulation than were commercial banks, and aware of their past record of conservatism, the savings banks, by and large, maintained an impressive record during the period of numerous bank failures that began at the end of 1930. Right up to the time of the banking holiday of March, 1933, mutual savings banks generally met all

demands that were made upon them by their depositors. Suspensions were virtually unknown. However, after the bank holiday, these institutions took effective steps, described below, to strengthen further their ability to meet larger-scale withdrawals by depositors.

Interest payments. By investing their funds in mortgages and high-grade bonds, mutual savings banks obtain an average rate of return that varies with changing money market conditions, but which is higher than that realized by commercial banks. Earning power is increased by the fact that, in addition to the funds of depositors, over a period of years a surplus is built up out of excess earnings over interest payments, and this is similarly invested and so adds to the income of the institution. From these earnings are deducted the expenses of operation, which seldom are as high as one per cent of the deposits, and any write-offs and reserves that are necessary. The balance is available for distribution to depositors, since there are no stockholders who must receive dividends.

Normally, 80 or 90 per cent of this balance of income will be distributed among the depositors, the payment being made at the end of each quarter-year. This payment is not interest, strictly speaking, since the institution makes no commitment, in advance, to pay a given rate but merely distributes to its depositors as much of the balance of earnings available each quarter as the trustees deem advisable. Hence the payment is more properly described as an "interest-dividend," rather than merely as interest.

At times when savings banks have suffered losses due to defaults on mortgages and bonds held, they have a write-down problem comparable to that of commercial banks. The write-down can be effected against surplus accumulated in the past. When the losses have been particularly severe, however, it is common to spread the write-off over a period of years, so that part of the earnings of each year can be applied to this purpose. After a period of deflation, when losses become larger than normal, it is good policy for a savings bank to pay a conservative rate of interest in relation to its income, in order to permit the institution to write off from current earnings the accumulated losses incurred at such a time. The conduct of a mutual savings bank may be better understood from the following illustration.

A given institution possesses \$10,000,000 of deposits and has a surplus of \$1,000,000. Let us assume that it obtains an average return of 3 per cent on its resources. Its annual investment in-

come would be \$330,000. Generally, this return is made possible by the large proportion of real estate loans commonly made by savings banks. Let us assume that expenses aggregate \$110,000. Usually, since savings banks own their own buildings, rent is not a cost. This situation helps to hold down the expense total, as does also the relatively low rate of taxation to which these banks are subject. Deducting the expenses, we have \$220,000 left. If \$30,000 is applied to write off losses on investments and $1\frac{1}{2}$ per cent is paid to depositors on their deposits, there is left \$40,000, which is added to surplus.

In order to bar competition for savings deposits through excessive interest payments, savings banks, like commercial institutions, must keep their distributions to depositors within the maximum rates fixed by the banking authorities.

Management. Mutual savings banks are managed by a board of trustees that is self-perpetuating in character. Since these banks have no stockholders, the trustees are not representatives of the owners of the savings bank; rather, they represent the depositors collectively.

Every effort is exerted to make the trustees regard their work as public service rather than a means of personal profit. They do not receive fees for attending meetings, as do the directors of commercial banks, and some efforts are made in the state laws to discourage indirect profits. However, trustees of mutual savings institutions usually may enjoy some advantages from their position. Thus, investment bankers may direct the purchase of new securities; commercial bankers may obtain deposits from mutual savings banks in their own banks; and lawyers, where the state law allows, may gain directly or indirectly from title searching and other legal work that necessarily arises on a large scale in connection with the real estate mortgage loans of savings institutions.

On the whole, management of mutual savings banks has been of a high order. There usually has been little question about its conservatism. Most of the criticism, rather, has been directed toward the fact that such institutions often display inadequate initiative and do not always accommodate themselves rapidly to changing economic and financial conditions.

Recent steps toward making savings banks liquid. Savings banks furnish individuals a means of saving money at a considerable rate of interest while retaining the ability to turn their funds into cash, at will, on very short notice. These banks invest pri-

marily in long-term assets and yet must be ready to pay off depositors within a month or less. Normally, deposits remain fairly constant, since new deposits practically offset withdrawals.

The experience of the early 'thirties indicated, however, that for absolute safety, savings banks should be able to transform their assets into cash when needed. Consequently, a number of steps have been taken to assure mutual savings banks of the ability to meet heavy withdrawals, should they occur.

(1) Mutual savings banks, like commercial banks and life insurance companies, embarked upon a policy of buying government bonds freely. Whereas, before the depression, government bonds constituted only a slight percentage of their total resources, because of higher yields available elsewhere, since 1932 such bonds have become a major factor in the portfolios of these institutions. It seems likely, in the future, that savings banks will always keep a large proportion of their resources in Federal Government obligations as a liquid reserve, since the marketability of these bonds is protected by the fact that the Federal Reserve banks may buy them and they may be used at par as collateral for advances which member banks may obtain from their Federal Reserve institutions.

(2) Mutual savings banks are now authorized to join the Federal Reserve System, in which event they obtain the rediscount privileges of other member banks. However, since they must subscribe to stock in or, if prohibited by State law from doing so, maintain a deposit with a Federal Reserve bank, equal to six-tenths of one per cent of their total deposit liabilities, most savings institutions have not applied for membership.

(3) Mutual savings banks may become members of the Federal Home Loan Bank System, and thus obtain the privilege of borrowing on their mortgages, in the aggregate, a sum up to 12 per cent of their holdings of home mortgages.

(4) Mutual savings banks may join the Federal Deposit Insurance Corporation, and thus give to their depositors the reassurance that comes with deposit insurance. Such membership greatly reduces the danger of large-scale withdrawals, especially since most savings bank deposit accounts are within the \$5,000 limit of Federal deposit insurance.

Savings banks in New York State set up their own deposit insurance fund, to perform the same functions as FDIC insurance, but subsequently abandoned this plan when they concluded that de-

posit insurance could be conducted better on an inclusive, nationwide scale. A separate insurance fund has been maintained in Massachusetts.

(5) Savings banks in several states have set up special institutions of their own to furnish rediscount and other facilities that will help meet heavy withdrawals of deposits, should they occur. Thus, in New York State there has been set up the Savings Banks Trust Co., which is owned by the mutual savings banks of the state and transacts business only with them. It provides a complete investment service to its members. The Savings Banks Trust Co., through its connections with commercial banks, is able to make available the resources of the Federal Reserve System to savings banks that need funds to meet heavy withdrawals of deposits. Also, the Institutional Securities Co. has been set up by the savings banks of the State for the specific purpose of purchasing mortgages from individual institutions that require increased liquidity, and servicing mortgage lending by the member mutual savings banks.

Summary. Savings banking has represented a basic departure from the original principle of self-liquidating banking operation. The bulk of the funds of such institutions is invested in long-term bonds and mortgages, as we have seen. While these institutions have maintained a remarkably good record of ability to meet heavy deposit withdrawals when they occur, nevertheless during the past few years there have been taken a number of precautions that will enable savings banks in the future to raise, in case of need, large amounts of money on their non-liquid resources. In addition, by holding substantial amounts of government bonds, individual savings institutions are better able than ever before to liquidate quickly the portion of their portfolios required.

Questions for Study and Review

1. What is the basic difference between commercial banking and savings banking?
2. What are the chief characteristics of savings deposits, as defined by the Board of Governors of the Federal Reserve System?
3. What was the principal reason for the establishment of the Postal Savings System? Is this system still needed?
4. What is the relative importance of each of the four classes of savings banking institutions in this country?
5. How do mutual savings banks differ from commercial banks in the matter of ownership? of regulation?

6. Why is the size of individual accounts in mutual savings banks limited?
7. How are the investments of mutual savings banks restricted?
8. What determines the rate of interest that mutual savings banks pay depositors?
9. Outline the steps that have been taken to increase the liquidity of mutual savings banking

Problems

1. The X Savings Bank has \$80,000,000 of deposits, on which it earns an average of 4 per cent per annum. Expenses amount to \$605,000 per annum. How much should be paid as an interest-dividend?
2. Mr. Harry Corwin, lawyer, has the choice of participating in the promotion of a mutual savings bank or a commercial bank. Which should he prefer? Give reasons.
3. The Green Savings Bank management is told that by spending \$150,000 on an advertising campaign, it can increase deposits by \$5,000,000. Should it embark upon this campaign?
4. Real estate mortgages can be obtained on a $4\frac{1}{2}$ per cent basis. Expenses, etc., which cannot be passed on to the mortgagors, amount to $\frac{1}{2}$ per cent. Government bonds are available on a 3 per cent basis. Which type of commitment should the lending officer of a mutual savings bank recommend to his trustees?

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CHAPTER 26

Urban and Farm Mortgage Banking

The nature of mortgage banking. Real estate, in the broad sense, constitutes the nation's greatest business. The financing of urban and farm real estate development, therefore, constitutes one of the major divisions of the field of finance, and is performed by a large number of institutions, some specialized and others more general in character.

The financing of real estate differs in several respects from other types of financing. Basic principles involved, however, are essentially the same.

The financing of urban and farm realty is characterized, in the first place, by the predominance of the small unit. While there are a number of very large buildings in our cities and several large-scale farming enterprises, individual homes and smaller farms still constitute the great bulk of the real estate of the country. Second, while income is important in supporting real estate, like business credit; nevertheless, special stress has traditionally been laid on the protection given by the sales value of the pledged real property, which can be sold to satisfy the loan in the event of a default. Third, the legal procedure for the protection of mortgagees is relatively well defined, so that it is usually easier for the holder of a real estate mortgage to protect himself in case of default than is the case with other types of creditors.

The business of mortgage banking is especially important in the United States because of the great expanse of the country and the very important rôle that urban real estate and agriculture have played in our economic development. Furthermore, the speed with which this development has taken place has tended to make

the burden of indebtedness resting on American real property relatively larger than is the case elsewhere in the world. As a result, mortgage banking in the past has not always been conducted upon a sound basis, and our history is replete with crises and failures of financial institutions incident to the inability of mortgagors to meet their obligations.

History of mortgage banking in the United States. During the colonial period, and also in the decades shortly following the adoption of the Constitution, specialized mortgage banks were promoted to lend money on the security of farms. In many cases, the loans were made on an excessively liberal basis because they were incurred during boom periods in which farm values soared to high levels justified only by speculative considerations. When values subsequently dropped and deflation of agricultural prices cut farm incomes simultaneously, the net burden proved excessive and defaults became widespread. Since early mortgage banks usually had but meager capital resources, their record was far from good.

During this earlier period, also, many commercial banks made real estate and farm loans, with or without mortgage security. Hence, each recurring crisis brought in its wake numerous bank failures caused primarily by defaults on mortgage loans. The panic of 1837, for example, involved an epidemic of bank failures that in some respects compared with that of 1930-1933. The primary cause was the failure of numerous "wild cat" banks whose chief activity was lending money directly or indirectly on farm and town realty.

The Civil War period witnessed the establishment of a national banking system from which mortgage lending was excluded. As a result, the business of real estate financing was largely shifted to State banks and trust companies. As the pace of economic development of the country gathered momentum following the conflict, a number of other financial institutions entered the mortgage lending field also. Foremost among these were the life insurance companies, the building and loan associations, and, later, real estate mortgage bond houses.

The very severe depression and deflation of the years 1930-1933, following upon twenty years of rapid increase in both farm and urban mortgage debt, brought far-reaching changes in this, as in other, sections of our financial machinery. A number of new institutions, some emergency and some designed to be permanent, were quickly brought into being to meet the crisis and to take the place

of institutions that suspended or curtailed their activities during the deflation era.

Farm mortgage banking. We shall first consider farm mortgage banking, both because it preceded the evolution of urban mortgage banking and because, being simpler, its fundamental principles may be more easily understood.

At the present time, the total mortgage debt resting upon American farms is less than \$7,000,000,000. The Bureau of Agricultural Economics reports that the outstanding total of farm mortgages rose from \$3,330,000,000 in 1910 to \$7,857,700,000 in 1920 and \$9,630,768,000 in 1930. Thereafter, there occurred a considerable deflation of farm mortgage indebtedness.

Despite this large mortgage total, it remains true that a majority of American farms, either because of their small size or because of the policy of their owners, are not mortgaged. Recent estimates indicate that only about 40 per cent of American farms have mortgages upon them.

The total of farm indebtedness may decline further if there is no lasting increase in farm values. An increasing proportion of farm mortgages are of the installment type, and so will be repaid gradually over a period of years. In the past, too many mortgages, both farm and urban, did not contain regular amortization provisions. This produced a tendency for farm mortgage debt to increase steadily, making periodic wholesale defaults virtually inevitable. The use of the installment mortgage on which the mortgagor makes regular payments, a logical and sensible scheme for the gradual liquidation of mortgage debts resting on real property, has been established as standard practice. Hence, the record of farm mortgages, other things being equal, promises to be better in the future than in the past.

The Federal Land Bank System. The Federal Government has for many years, in line with the practice followed in other countries, sought to facilitate borrowing on attractive terms by farmers. While the Federal Reserve Act, passed in 1913, contained special provisions to facilitate agricultural financing, such as the authority given the Federal Reserve banks to rediscount agricultural paper with a six-months' maturity while ordinary commercial paper had to have a maturity of ninety days or less to be eligible, it naturally did not concern itself with long-term lending to farmers. There was criticism of this in western states, where it was argued that industry was being aided more than agriculture. Accordingly, Con-

gress passed in 1917 the Federal Farm Loan Act, which set up a Federal Land Bank System. Subsequent legislation has enhanced its importance, so that the Land Banks are now the most important lenders on farm mortgages. In time, a very large part, if not the larger part, of outstanding farm mortgages in the United States will probably be held by these banks.

The Federal Land Banks, twelve in number, serve as many districts, embracing the entire United States. These banks operate under the supervision of the Governor of the Farm Credit Administration, who is located in Washington and is responsible to the Secretary of Agriculture.

The business of the Federal Land Banks is to lend on mortgages having a value of not more than 50 per cent of the value of the farm land and 20 per cent of the value of permanent improvements pledged as security for the advance. These loans bear a rate of interest that is normally not more than 1 per cent higher than the interest rate on the last issue of bonds sold by the Federal Land Banks, and in no event higher than 6 per cent. Under emergency legislation, however, the banks were authorized to make loans at $3\frac{1}{2}$ per cent, the Federal Treasury making this possible by subscribing to additional stock of the Land Banks. Amortization is to be effected through regular payments in from 5 to 40 years. Farm relief legislation enacted in 1933 reduced the interest and alleviated the sinking fund provisions on mortgages previously arranged.

The Federal Land Banks obtain money from two sources. First and by far the most important, they sell their own issues of bonds secured by farm mortgages. These bonds are the joint and several obligations of the twelve Land Banks. Their investment status is enhanced by the general understanding that the United States Government will come to the aid of the Federal Land Banks whenever they may get into difficulty, although it is not under legal obligation to do so. The purchase of large amounts of additional stock in the Land Banks by the Federal Government in 1933, when defaults on mortgages held were numerous, has tended to confirm this impression. Also, unless issued after March 1, 1941, interest on Federal Land Bank bonds is exempt from income taxes. Second, the Federal Land Banks raise capital by selling stock to borrowers and the Treasury.

Most Federal Land Bank loans are made not directly, but through National Farm Loan Associations. These associations are

coöperative groups of ten or more farmers who wish to borrow, in the aggregate, \$20,000 or more from the Federal Land Bank of the district. The farmer members turn over their mortgages, which meet the requirements laid down by the Farm Credit Administration and the law, to the National Farm Loan Association, from which they are to receive 95 per cent of the face value in cash and 5 per cent in stock of the Association. The Association, in turn, turns over these mortgages to the Federal Land Bank and receives 95 per cent of their face value in cash and 5 per cent in stock of the Land Bank.

As long as defaults on mortgage loans made by one National Farm Loan Association do not exceed 5 per cent of the aggregate, there is no loss to the Federal Land Bank, since the stock of the latter held by the National Farm Loan Association is cancelled up to such an amount. Similarly, the individual farmers who have borrowed through a National Farm Loan Association absorb losses up to 5 per cent of the amount of the borrowings of their own group. This occurs through cancellation of stock of an Association in an amount equal to losses incurred on loans made to members, up to the face value of the shares. Local groups of farmers in this way in effect guarantee one another's loans from the Federal Land Bank System up to 5 per cent of the amount each farmer borrows.

The emergency legislation of 1933, and subsequent measures, authorized direct loans by the Federal Land Banks as agents for the Land Bank Commissioner. These "Land Bank Commissioner loans" represent a considerable proportion of the loans.

The operations of the Federal Land Bank System and the present status of these institutions are reflected in the balance sheet of the twelve Federal Land Banks combined, which is presented on page 480.

The original Federal Farm Loan Act also provided for the creation of a privately-owned system of Joint Stock Land Banks to supplement the Federal Land Banks and assure more aggressive competition in lending money to farmers. However, these institutions were not well managed in a number of cases, and a number of them went into receivership. Under legislation passed in 1933, lending by the Joint Stock Land Banks was stopped, and they were liquidated.

The Federal Farm Mortgage Corporation. The Federal Land Banks, which are virtually a governmental agency, are the most

important lenders on farm mortgages. In addition, the Federal Government set up in 1933 the Federal Farm Mortgage Corporation to facilitate refunding of outstanding farm mortgages into

FEDERAL LAND BANKS

Consolidated Statement (twelve banks combined), June 30, 1944

<i>Assets</i>	
Mortgage loans, less matured principal unpaid	\$1,243,897,936.25
Purchase money mortgages, contracts, etc., less matured principal unpaid	88,837,927.94
Extensions, less partial payments	2,514,650.29
Delinquent installments, less partial payments	4,601,640.35
Accrued interest receivable on mortgage loans (not due)	15,664,070.57
Total (less reserve, \$70,241,682.79)	\$1,285,274,542.61
Cash—General funds	28,334,510.52
Deposits with the Treasurer of the United States	9,020,309.49
Due from the Secretary of the Treasury (interest reductions and paid-in surplus)	4,219,314.78
Accounts receivable	1,682,196.62
United States Government obligations, direct and fully guaranteed	404,346,733.25
Other bonds and securities	3,602.00
Accrued interest receivable on securities (not due)	1,635,825.60
Real estate owned, less reserve	8,643,085.26
Loans called for foreclosure, judgments, etc., less reserve	2,908,061.88
Loans in suspense	2,066,500.32
Deferred expense	2,380,093.58
Other assets, less reserve	5,178,879.50
Total	\$1,755,693,655.41
<i>Liabilities</i>	
Federal farm loan bonds outstanding, less bonds held by banks	\$1,095,596,300.00
Matured obligations (Federal farm loan bonds including interest)	1,843,706.00
Notes payable	138,479,131.32
Accrued interest payable (not due)	13,367,430.83
Deferred proceeds of loans	688,946.43
Accounts payable	931,208.90
Trust accounts	5,099,777.71
Payments received on unmatured installments	23,343,506.73
Taxes and assessments due on bank-owned real estate	30,708.21
Other liabilities	2,330,782.69
Deferred income	32,504.18
Reserve for title losses	
Capital stock	202,012,475.50
Paid-in surplus	135,096,791.06
Legal reserve	78,881,232.77
Earned surplus	57,959,063.08
Total	\$1,755,693,655.41

obligations with a lower rate of interest. This corporation no longer makes loans, but is engaged in liquidating the mortgages it took over in 1933 and 1934. It was authorized to exchange its own

bonds, on which the payment of interest and principal is guaranteed by the Federal Government, for outstanding farm mortgages held by financial institutions and individuals. These mortgages had to be scaled down, where excessive in amount, to 50 per cent of the value of the land and 20 per cent of the value of improvements pledged as security. The interest rate on such converted mortgages was reduced to that prevailing on Federal Land Bank loans.

The Federal Government, through the Federal Land Banks and the Federal Farm Mortgage Corporation, holds indirectly some 30 per cent of the total amount of farm mortgages outstanding. The large-scale participation of the Federal Government in the farm mortgage lending business undoubtedly alleviated individual hardship in a number of cases. It has been defended by many, including some who regard the government's entry into the banking business generally as of doubtful wisdom, as an emergency measure to ameliorate the effects upon helpless farmers of a major deflation period. The experience of both the Federal Land Banks and the Federal Farm Mortgage Corporation is hardly illustrative of what government conduct of banking may mean in other fields, since the Federal Government heavily subsidizes agriculture, and so itself largely helps farmers to service their debts.

Other farm lending institutions. Among private lending institutions, the most important in the farm mortgage field are the life insurance companies. At the end of 1944, they reported holding approximately \$750,000,000 of farm mortgage loans. This represented a sharp reduction, however, from the total of more than \$2,000,000,000 of mortgages on farm properties held in 1920. The deflation of farm prices and resulting numerous mortgage defaults, competition from government agencies, and moratorium legislation combined to make farm mortgages less desirable as investments. Government competition has depressed rates and made farm mortgages less attractive for private investors. These lower rates are the more discouraging because many states have passed moratorium statutes, under which mortgagors have been able to stop payment of interest and principal for a period without incurring the risk of foreclosure. Several such statutes have been upheld by the United States Supreme Court. Congress enacted a modified national moratorium statute on farm mortgages, the Frazier-Lemke Act of 1935, as part of the National Bankruptcy Act.

Next to the life insurance companies, the most important lenders on farm mortgages are commercial banks. They held \$550,000,000

of such loans at the end of 1941. The balance of farm mortgage indebtedness is owned chiefly by individual investors, especially in rural communities.

Intermediate and short-term agricultural finance. A number of government and private agencies specialize in making intermediate and short-term loans to farmers and live stock raisers. Because of the relatively longer period required to finance farmers' working capital requirements, and the special risks involved due to weather, commercial banks have met these needs only in part, although in rural communities such loans have loomed large in the business of local banks. The Federal Intermediate Credit Banks, twelve in number, make loans that usually run from three months to a year to coöperative marketing and purchasing associations and local institutions that lend to farmers for intermediate terms up to three years. The Central Bank for Co-operatives and twelve District Banks for Co-operatives also help to finance coöperative marketing associations. Short-term loans are made by Production Credit Associations, which are financed through twelve Production Credit Corporations. Emergency crop and feed loans are made directly by the Farm Credit Administration. All these agencies, like the Federal Land Banks, are now part of the Farm Credit Administration, an agency of the Department of Agriculture.

The Commodity Credit Corporation, an independent agency, makes loans to farmers on specified crops, at times to an amount above the market price of such commodities. It is a price-support more than a credit agency. Such loans are made at the direction of the President, as part of the agricultural control program authorized by the Agricultural Adjustment Act and related legislation.

Urban mortgage lending. Urban real estate financing has in recent decades exceeded by far the total of farm mortgage financing. The Twentieth Century Fund has estimated that the volume of outstanding urban realty mortgages rose from \$13,000,000,000 at the beginning of the century to \$35,000,000,000 in 1928. From that high level the volume of urban mortgage indebtedness declined to about \$30,000,000,000 by 1945, as a result of foreclosures, repayments, and a subnormal volume of new building during the '30s. Out of this total, about \$12,000,000,000 are loans on small homes, and the balance on larger residential, commercial, or eleemosynary structures.

Since the ability of owners of urban realty to maintain payments to mortgagees is not subject to the hazards of weather and declining

farm prices, it is usually considered safe to lend a larger proportion of the value of the pledged property than is the case with farm loans. This is particularly the case with what is known as "general purpose" property, such as homes and office buildings, for which an active market normally exists. Recently, however, there has been a tendency to place greater weight than formerly upon the income derived from urban property offered as security for loans, and correspondingly less upon the amount of the loan in relation to the appraised value of land and buildings.

Because political agitation for its intervention was less active, the Federal Government did not enter the urban lending field directly until 1933. Since then, the government has made mortgage loans, guaranteed mortgages, and undertaken home building for low-income families on its own account. The National Housing Agency, since 1942, directs all such activities. It comprises the Federal Home Loan Bank Administration, the Federal Housing Administration, and the Federal Public Housing Authority.

Savings and loan associations. Chief among financial institutions exclusively devoted to lending on urban mortgages are the savings and loan associations, which function throughout the country. At the end of 1942, these associations were responsible for some \$4,500,000,000 of such loans, which compared with a peak level of almost \$8,000,000,000 before the depression.

Building and loan associations are organized on the coöperative principle, and are not normally operated for profit. They lend on the security of first mortgages on homes, usually up to 70 or 80 per cent of the appraised value. Funds for this purpose are obtained through selling shares to be paid for on the installment plan. These shares usually have a par value of \$250, and are paid for through regular weekly or monthly payments by subscribers. The period of payment is shortened by application of dividends declared on the shares to the principal.

When a building and loan association encounters adverse conditions because of defaults on interest and principal payments and declines in the value of pledged property, it can meet the situation simply by ceasing to pay dividends on its shares. Hence, if operated strictly in accordance with the basic principles just outlined, it would be quite unusual for a building and loan association to fail. But many such associations, to hasten their growth, have accepted deposits subject to withdrawal and have given shareholders the privilege of withdrawing their payments under certain

conditions before the shares have been fully paid up. When they do this, their operation tends to resemble more that of a savings bank.

Individual accounts in eligible building and loan associations up to \$5,000 may be insured against loss through the Federal Savings and Loan Insurance Corporation. The insured associations then pay annual premiums of $\frac{1}{8}$ of one per cent of the insured accounts, until a reserve fund has been set up equal to 5 per cent of the total insured accounts.

Until 1933, building and loan associations were chartered by the several states. The Home Owners' Loan Act of 1933 provided for Federal Savings and Loan Associations, which were to be under the supervision of the Federal Home Loan Board, would be entitled to Federal aid, and would automatically enjoy insurance of individual accounts up to \$5,000. Almost 1500 such associations had taken out Federal charters by the end of 1942.

The future of the building and loan association as a mortgage banking agency of prime importance seems assured, and these institutions may again assume the leading place in the home loan field in the future. The chief competition comes from insurance companies and savings banks. Federal insurance of individual accounts, provided by the National Housing Act of 1934, has greatly added to their appeal.

Mutual savings banks. Mutual savings banks, whose operations were discussed in detail in Chapter XXV, are responsible for the largest volume of real estate mortgage loans. At the end of 1941, they had outstanding almost \$5,000,000,000 of such advances.

The states in which mutual savings banks operate maintain their own restrictions on mortgage loans made by them. In general, the criteria set up approximate those of New York, where these institutions may lend up to 60 per cent of the value of improved and 40 per cent of the value of unimproved property.

Other mortgage lending institutions. A third important group of institutions lending on urban mortgages are the life insurance companies. In the aggregate, the life insurance companies held over \$5,000,000,000 in urban real estate mortgages at the end of 1945. State moratorium statutes and government measures tending to reduce interest rates on real estate loans have made life insurance companies more cautious in mortgage lending since the '20s. However, they have been partial to the purchase of mortgages guaranteed by the Federal Housing Authority.

Commercial banks also have been responsible for a large volume of urban mortgage loans, the total held at the end of 1941 being \$4,383,000,000. The Banking Act of 1935, as has been already seen, both liberalized the mortgage lending powers of national banks and permitted them to make such loans up to the amount of their capital and surplus, or up to 60 per cent of the amount of their time and savings deposits, whichever is larger. However, the same factors that have made insurance companies slow to expand their mortgage loans apply to the banks also.

A very important source of demand for real estate mortgages is the trust companies, which purchase large amounts of such liens for trust accounts. In making such loans, they are subject to the restrictions on trustee investments contained in State laws. In New York State, unless a trustee is specifically released by the deed of trust, it may lend no more than 66 2/3 per cent of the value of real property from trust funds. Exact figures are not available, but trust company holdings of real estate mortgages in trust accounts aggregate several billions of dollars.

The Home Owners' Loan Corporation and the Home Loan Banks. To facilitate the refunding of home mortgages into lower interest liens during the depression emergency, the Home Owners' Loan Corporation was established in 1933. This agency, like the Federal Farm Mortgage Corporation, no longer makes loans, but it continues active as a liquidating organization. It loaned upwards of \$3,000,000,000 to more than 1,000,000 home owners.

The Corporation's chief function was to exchange government guaranteed bonds, mostly bearing 2¾ per cent interest, for outstanding home mortgages. Such bonds were issued only up to 80 per cent of the value of pledged property. Mortgages taken over by the Home Owners' Loan Corporation were to be amortized by regular payments within 15 years. Thus, the corporation has helped to establish the principle of gradual repayment of mortgage debt, which had been even less common in urban than in agricultural mortgage lending.

Apart from the Home Owners' Loan Corporation, which was an emergency agency, there had been set up as early as 1932 the Federal Home Loan Banks. These institutions constitute a permanent group of institutions lending to savings and loan associations, savings banks, and insurance companies. They thus represent an application of the rediscount principle to urban mortgages. However, their lending power is limited to a maximum of 12 per cent of

all the home mortgages owned by a member agency, and hence they are restricted in the extent to which they may aid their members. Upwards of 3,500 home lending institutions have joined the system.

Federal mortgage insurance. The Federal Government has also set up a system of insurance of individual mortgages when held by banks and trust companies, building and loan associations, and other approved lending institutions, as a further means of facilitating the borrowing of money for home building at low cost. This insurance, offered by the Federal Housing Administration, is available on first mortgages on 1-4 family dwellings up to 80 per cent of the appraised value of the pledged property, with a maximum of \$16,000. Insured mortgages must be of the installment type, and may have a maturity up to 20 years. A premium of $\frac{1}{2}$ or 1 per cent per annum, depending on the type of transaction, is charged, but if it proves excessive, the excess will go to extinguish part of the debt. A limited amount of mortgages of low-cost housing developments may be insured similarly. Authority is given for insuring 90 per cent loans on houses costing no more than \$6,000, with a maturity of 25 years.

By requiring that insured mortgages be the first lien on pledged property, and by requiring that they shall be amortized by monthly payments during a period up to a maximum of twenty years, Federal mortgage insurance has contributed materially to the improvement of real estate lending standards in this country. More than 12,000 lending institutions have been approved for the making of such insured loans. Also, attempts have been made to market bonds secured by mortgages guaranteed by the Federal Housing Administration, thus creating a standardized type of mortgage bond that would replace the old-fashioned real estate mortgage bonds and guaranteed mortgage certificates which caused very heavy losses to investors during the deflation era of the early 'thirties.

The FHA does not itself take over insured mortgages that have gone into default. It requires the owner of the mortgage to carry out the foreclosure, making some allowance for the expenses involved, and it then turns over four-year three per cent bonds, guaranteed by the Government, for the foreclosed properties. Thus, the Federal Government avoids the political risks incident to foreclosing mortgages on its own account.

Basic principles of mortgage banking. The preceding pages have been concerned largely with an outline of the major institutions that lend on farm and urban real estate mortgages.

On the basis of the experience of these institutions in the past, it might be said that mortgage banking is conducted soundly when it conforms to the following basic principles:

- (1) Individual loans should bear a reasonable proportion to the conservatively appraised value of the property, such valuation to reflect earning power as well as market prices of similar property.
- (2) Mortgage loans should not be made on special-purpose property which is not likely to enjoy a fair market during normal times
- (3) Mortgage loans should be based in part upon the income of the mortgagor or that which is obtained regularly from the pledged property
- (4) Provision should be made for the gradual repayment of these loans, so that a definite plan for the retirement of indebtedness against the property is assured
- (5) The rate of the amortization should be sufficient to assure that the loan will decline at least as rapidly as depreciation and obsolescence reduce the value of the pledged property and the income derived from it

It is a function of an efficient mortgage banking system to provide a regular flow of funds, at reasonably low but remunerative rates of interest, to owners of farm and urban realty within the scope of these principles. While it cannot be said that the American mortgage banking system fully measures up to these requirements, progress has been made in that direction. If the government will refrain from efforts to depress interest rates on such loans to unremunerative levels, considering the expenses to the lender and the risks involved, and if moratorium statutes and other such artificial weakening of the quality of real estate liens are ended, considerable further advance towards the development of a sound and efficient mortgage banking system in the United States should be witnessed. Such a system would contribute materially to the stability of real estate values and building activity throughout the country.

Questions for Study and Review

1. How does real estate financing differ essentially from other types of banking?
2. What is mortgage banking? Why is it so important in the United States?
3. Summarize the history of mortgage lending in the United States.
4. What has been the trend of farm mortgage debt in the past 25 years?
5. How does the Federal Land Bank System operate?
6. How does urban mortgage financing compare in extent with farm mortgage lending?
7. What is the principle of operation of savings and loan associations? How safe is this type of enterprise when properly conducted?

8. How may accounts in such associations be insured?
9. What types of mortgages may be insured with the FHA?
10. Outline five basic principles of sound mortgage banking.

Problems

1. A farmer finds that his land is appraised at \$12,000, and his permanent improvement at \$3,500. How much could he borrow from a Federal Land Bank, and on what terms? Describe the rôle of the National Farm Loan Association in such a transaction.

2. A home owner's property is appraised at \$9,000. How much would he be able to borrow from the average building and loan association, insurance company, and savings bank? What factors may affect the amount of the loan besides the appraised value of the property?

3. A small apartment house has 10 apartments with an average yearly rental of \$900 each. The repair and maintenance bill on the house is \$2,400 per annum, and superintendent's wages and other items are \$1,600. Taxes are \$1,500 yearly. On the basis of income, at how much would this building be appraised, allowing for a 10 per cent vacancy? How much can safely be loaned in the light of this income?

4. The York Savings and Loan Association permits members to withdraw the payments they make on account for shares, if they do not themselves borrow, on 30 days' notice. Also, sums left as payment for fully-paid shares receive 3 per cent interest until withdrawn, if the shares are not taken out. Is this sound? What changes in these arrangements would you suggest?

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CHAPTER 27

Fiduciary Services of Banks and Trust Companies

Non-banking services of banks. Modern banks engage in many activities that have little, or nothing, to do with their main function. By far the most important of such activities is loosely referred to as the "trust" business. This is the popular term for the many fiduciary services that trust institutions render to business and individuals.

Banks and trust companies are not the only agencies that carry on such activities. Individuals, legally, can perform any fiduciary function. Lawyers, in particular, are continually engaged in carrying out fiduciary obligations. Historically, in fact, fiduciary services were performed exclusively by individuals until about a hundred years ago.

Development of trusteeship concept. In 2548 B.C., in Egypt, Uah left a formal, witnessed will in which he appointed his wife executor of his estate, and a friend guardian of his son. The will of Sennacherib, the Assyrian Emperor, in the seventh century B.C., is another example of an early will.

In another part of the world, in 457 B.C., an association was formed by a group of Japanese to manage and settle the estate of a wealthy noble. It is sad to record that this rudimentary trust company met with instant and complete disaster at the hands of Oriental justice. On the theory that such a group could not have a conscience and, consequently, was unfit for the responsibilities involved, the Mikado ordered the entire group beheaded.

The antiquity of the trusteeship concept is well established by many known cases, of which the foregoing are but interesting examples.

In a broader sense, the trusteeship concept lies at the very base of civilization. According to the Old Testament, Jehovah appointed Moses trustee of the people of Israel and gave him instructions to lead them out of bondage. At an early date the church was appointed trustee of salvation, and for thousands of years the priesthood was the sole trustee of education. Thus, the trusteeship concept is indeed a fundamental and sacred one.

Corporate fiduciaries. Considered in the light of history, is it not surprising that modern man should look to a corporation, which "has neither a body to be kicked nor a soul to be damned," for personal trust service? The explanation is not hard to find, however, and, as might be surmised, it is an economic one.

Unsatisfactory experience with the individual trustee—due to limited financial responsibility; the contingency of death, absence, or incapacity; the possibility of bad management or, even worse, of fraud—has caused a gradual shift to the corporate trustee during the last hundred years. After forty-four hundred years, and probably more, of individual trusteeship, now in the short span of a century the corporate newcomer dominates the field—in the United States, at least.

The continuity of existence and the financial responsibility of the corporate fiduciary have been important factors in this change. A fiduciary must proceed constantly through a "no man's land" of doubt, uncertainty, want of judicial decisions, complicated facts sprinkled with the deadly mines of litigation, controversy, and financial loss. The atmosphere in which the fiduciary moves is charged with severe legal liabilities. Fiduciary service should be classified as a hazardous financial occupation. Adequate records, skilled personnel, and able investment and legal counsel are prerequisite to success in this field. Public recognition of the advantages of the corporate fiduciary, in these respects, explains their phenomenal growth at the expense of the individual trustee.

The word "fiduciary" has broad legal, financial, and moral significance. It includes the more narrow legal relationships of *trusts* and *agencies*, but is even broader than these two in its scope. Legally, the phrases "fiduciary relation" and "confidential relation" are interchangeable. The term "fiduciary" is broad enough to cover all the operations of trust institutions, except the banking and auxiliary services, such as insurance and safety deposit.

The fiduciary concept is so broad that there are many such relationships which a corporate fiduciary cannot undertake, and one, in

particular, which it would be unlawful for the fiduciary to attempt: the relationship between attorney and client, since corporations are forbidden to practice law.

It should be noted, however, that, despite the legal distinction indicated above, the term "trust" is ordinarily used, even by corporate fiduciaries themselves, as synonymous with "fiduciary." Nonetheless, the more precise legal usage is the correct one.

Generally speaking, corporations are not permitted to undertake these "confidential relationships" unless specifically so authorized by law. Naturally trust companies are so authorized, since they are organized for that purpose. Commonly, however, trust companies engage in general banking activities also, and may be considered as banks organized under the trust company law. A few trust companies—and their number is growing—confine themselves exclusively to fiduciary business.

Trust companies are chartered under state law, either by special legislative act or under a special trust company statute. They are also supervised by the states that charter them.

From the figures available in certain states that require reports, the known volume of assets managed by a few large trust companies, and various estimates and studies, it is probable that the trust companies now administer upwards of fifty billions of personal trust assets. Their corporate trust business is estimated to involve an aggregate two or three times larger; however, few statistics are available upon which to base such an estimate.

State banks organized under the general banking law of a state generally have the authority to open a trust department and engage in that business. There are no exact figures, or even estimates, of the volume of trust business administered by state banks, but it is undoubtedly quite small in comparison with that of the trust companies and the trust departments of the national banks.

National banks, prior to the passage of the Federal Reserve Act in 1913, were not permitted to engage in fiduciary or trust activities. Because of this disability, national banks, except in the East, often organized trust companies with similar names under state law when the potential volume of trust business warranted such action. Section 11-k of the Federal Reserve Act authorizes and empowers the Board of Governors of the Federal Reserve System to grant national banks, upon application, permission to transact trust and fiduciary business and use the word "trust" in their names if they wish. The Act requires national banks exercising trust powers to

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segregate all assets held in any fiduciary capacity and to keep a separate set of trust books and records. Furthermore, the trust department is specifically made subject to examination by state supervisory authorities. The Board of Governors, given such authority, has implemented the Act with several regulations the net effect of which has been to put the national banks on a competitive basis with the state institutions, although the former are not given any special advantages.

Until the McFadden-Pepper Act of 1927 gave them indefinite (during good behavior) life, national banks suffered a handicap in securing trust business because their charters were limited to a definite term of years, varied by statutes from time to time. With this last disability removed, their trust business began to increase at a rapid rate.

Seventeen hundred and ninety-nine national banks had authority to exercise trust powers on December 31, 1943, with combined banking assets of \$55,418,476,506, which represents 35.63 per cent of the number and 85.9 per cent of the assets of all banks in the national banking system.

Of the number authorized to exercise trust powers 1,494 banks had active trust departments and were administering 138,015 individual trusts with assets aggregating \$12,425,461,874, and in addition were administering 20,301 corporate trusts and acting as trustees for outstanding note and bond issues amounting to \$8,689,375,301.

Compared with 1939 these figures represent a net increase of 1,564, or 1.1 per cent, in the number of trusts being administered; an increase of \$3,141,554,598, or 33.8 per cent, in the volume of individual trust assets; and a reduction of \$1,079,351,423 or 11.05 per cent, in the volume of note and bond issues outstanding under which national banks had been named to act as trustees.¹

Scope of fiduciary services. The financial aspect of corporate fiduciaryship is indeed an amazing one. The figure of over fifty billions of personal trust assets is practically beyond comprehension. Yet this is merely one phase of their activities. The volume of corporate trusts administered is two or three times as large. Although the economic, social, and political aspects of such financial magnitudes will not be discussed here, these points should not be overlooked—in fact, they can hardly be overemphasized.

On a functional basis, trust institution activities fall under three

¹ *Report of the Comptroller of the Currency, 1944.*

headings: (1) banking, (2) auxiliary or miscellaneous, and (3) fiduciary.

(1) The *banking* activities are the conventional ones covered in the other chapters of this book. Special treatment is, therefore, unnecessary here.

(2) The *auxiliary* services—such as fidelity insurance, title insurance, and guaranty services—are discussed in a later section of this chapter.

(3) The *fiduciary* services include: (a) trusts administered for individuals, (b) trusts for corporations, and (c) court trusts. They also include agencies for individuals and agencies for corporations.

Legal nature of a trust. It should be clearly understood that the trust is a legal device and a very ancient one. Some writers trace the modern trust concept to the legislation which the Roman Emperor Augustus enacted concerning *fidei commissum* (property in trust). Others, particularly the officers of trust companies, insist on a much earlier origin. Most legal authorities, however, agree that the modern trust developed from the ancient "use."

The use goes far back in English history—how far no one knows exactly. It appears, for instance, in the Domesday Book. The use was developed to serve several purposes, the chief of these being to evade the feudal burdens on wardship and marriage, the harsh laws of forfeiture for treason and escheat for felony, and the Statutes of Mortmain. It was also utilized to achieve the effect of the modern will, since testamentary disposition of land was not permitted by early English law; and to permit religious organizations, such as the Franciscan Friars, to enjoy the benefits of the ownership of land without violation of their oaths of poverty. One of the very earliest records of the use in land is that of a conveyance of land in the city of Oxford, in the second quarter of the thirteenth century, for the benefit of the Franciscan Friars.

Historians assert that more than half the land of England was held in trust at the end of the fifteenth century. Certainly, there is no lack of precedents, and it is safe to say that the trust is one of the most firmly grounded principles of American jurisprudence.

The trust looked to equity for its enforcement, as it was never recognized by the *common law*. The invention and development of the trust are considered the greatest contribution of equity to modern economic organization. Trusts are now recognized in the law. State legislatures have passed specific statutes governing the creation of trusts, their regulation, duration, and (in some states)

administration. In certain states the administration is still left chiefly to the jurisdiction of courts of equity.

A "trust" may be defined as an *arrangement by which confidence and legal title are reposed in one party, known as the "trustee," for the benefit of another, known as the "beneficiary."* Legally, there are three distinct parties to the usual trust: (1) the *creator*, who may also be the beneficiary; (2) the *trustee*, who may also be the creator; and (3) the *beneficiary*, or *cestui que trust*. In essence, the trust separates ownership and enjoyment, since the trustee holds legal title and the beneficiary has equitable title.

The vesting of legal title in the one in whom confidence is reposed is the distinguishing characteristic of the trust. This factor differentiates it from the other fiduciary relationships. In agency, for example, the agent does not have title.

The trust, strictly speaking, differs from *contract*, as consideration is not necessary, and gives rise to certain implied and statutory duties in addition to those expressly stated in the trust instrument. In view of the confidence reposed in the trustee, the courts have thrown every possible safeguard around the performance of duties involved. The trustee is held to much higher standards of action and ethics than would be the case if the trust instrument were merely a contract. Legally, there is a great difference: the contract has its origin in common law, and, as noted before, the trust was originally enforced only in courts of equity.

Early English experience with trusts indicated the danger of permitting perpetual trusts. Such trusts are now forbidden, except for charitable purposes, under the rule against perpetuities. A "perpetuity" is an estate that cannot be alienated (transferred other than as originally directed), as one jurist put it, "even though all mankind joined in the conveyance." Wisely, the law intervenes to prevent the ownership of property from reaching such a static state. The rule against perpetuities varies in different states; however, the one which is most usual, and which is known as the "common law rule," forbids holding an estate intact for more than a life (or lives) in being at the time the trust is created, and twenty-one years after, except in the case of a posthumous child who would inherit. In this instance it may be held nine months longer, at most. The trust must be distributed to the remaindermen before the expiration of the specified period.

There are two general classifications of trusts: (1) trusts in which control of the property, together with the title, is turned over

to the trustee; and (2) trusts in which the trustee secures title but does not secure direct control, except in the event of certain contingencies specified in the trust instrument. Most *personal trusts* are of the first type, whereas *corporate trusts* are of the second.

The Trust Division of the American Bankers Association has adopted a statement of principles in which *trust business* is outlined as follows:

Trust business is the business of settling estates, administering trusts and performing agencies in all appropriate cases for individuals, partnerships, associations, business corporations; public, educational, social, recreational, and charitable institutions, and units of government. It is advisable that a trust institution should limit the functions of its trust department to such services.

Personal trust department. Although there is no uniformity in the internal organization of trust institutions, personal trusts are ordinarily administered in a department of that name. The personal trust department may (especially in large banks) be further subdivided into several operating units; for example, the probate, contractual, real estate, and investment divisions. On a functional basis, the department may be considered as comprising the following units: an administrative group, composed of officers; a research and statistical group, made up of analysts who aid the officers; and a clerical group, composed of persons responsible for routine operations. The extent of subdivision, or combination, of function and operation will depend, of course, upon the character and volume of trusts being administered by the department.

The administration of personal trusts requires a high type of personnel. The wide variety of services performed makes it impossible to standardize the work as a whole, although some of the less important operations can be reduced to routine. The officers, analysts, and clerical staff should be men of real ability, broad education, and deep and sympathetic human understanding. Their problem is a human one, and, let it be emphasized, the relationship is that of *confidence*. Institutions have no moral right to offer trust service, if they are unwilling to bear the expense of developing a trust staff that will measure up to such standards. Furthermore, the legal liabilities in handling trust business are so great that institutions which attempt the services with poor personnel are likely to find their profits wiped out by the losses incurred.

A trust institution cannot be made to accept against its will an *express* trust. It is under no legal or moral obligation to accept all

business offered. There should be two determining factors in the acceptance of personal trust business: (1) Is trust service needed? (2) Can the service be rendered properly? If the answer to either of these questions is in the negative, the business should be refused no matter how lucrative it promises to be. Any other policy will undermine public confidence in corporate fiduciaries, and all institutions in the field will suffer.

The more important personal trust services are explained in the sections which follow.

Executor or administrator. A trust institution may be named in a will to act as executor or co-executor of an estate. Upon the death of the testator, the executor probates (proves) the will, receiving from the court *letters testamentary* which confirm the authority to *distribute* the estate according to the provisions of the will. The executor then marshals the assets, pays all just debts, and distributes the net estate to the legal heirs or devisees.

A trust institution may be appointed by the court as *administrator* to settle an estate for a person who dies intestate (without a will) or does not appoint an *executor*. Furthermore, if the court does not approve (for cause) the executor selected by the testator, or if the executor selected refuses to serve, or if for any other reason the executorship becomes vacant, the court appoints an *administrator-with-the-will-annexed*.

The duties of executor and administrator are substantially identical, with the exception of the probate of the will, and except that modern wills very often give much wider administrative powers to executors than are given to administrators by law. Since their essential function is to liquidate the estate, their work is of a more or less temporary character, depending on the size of the estate. Ordinarily estates are settled in less than eighteen months. Larger estates naturally take a somewhat longer time. The duties of administration include the filing of an inventory of personal property; the investigation and payment of all claims against the estate, including taxes; the distribution of the residue as directed by the will (or according to law, if there is no will); and the filing of a final accounting with the court. In large estates several accountings may be filed. All of this procedure involves much legal, financial, clerical, and accounting work, which the corporate fiduciary is well equipped to undertake.

The will may name an individual (friend or business associate of the testator) as executor, and a corporate fiduciary as co-executor.

This arrangement relieves the executor of the many details of liquidating the estate, and is an important financial safeguard to the heirs if the corporate fiduciary is given sole custody of the assets.

A corporate fiduciary may be appointed by a court to serve as *guardian, conservator, committee, or curator* of the property (more rarely of the person) of a minor, lunatic, drunkard, or other incompetent.

Trustee or co-trustee of personal trusts. A corporate fiduciary may be designated by will or by the courts to execute a trust created by a will. When so designated, the trust institution becomes the *testamentary trustee*. It is from this source that most of the personal trust business is secured.

A will may appoint the executor to act as trustee after winding up the executorship. While this practice is frequently followed, two separate functions are involved, and they should not be confused. Whereas it is the duty of the executor to liquidate the estate as expeditiously as possible, it is the duty of the testamentary trustee to hold title to, to invest, and otherwise to care for the trust funds or property, disposing of the income and principal as directed in the *trust* established by the will.

Voluntary trusts (inter vivos), likewise, may be accepted by corporate fiduciaries. In essence, this is the placing of property, real or personal, in the possession of a trustee for any lawful purpose. The property so held is called the "trust estate," and title passes to the trustee, as explained earlier in the chapter.

This transfer may be either *revocable* or *irrevocable*. If the trust instrument provides that the transfer cannot be revoked by the creator of the trust, the trust estate is put beyond the reach of creditors (except to the extent of the interest reserved by the creator, or unless done in fraud of creditors), and certain inheritance, estate, and income tax benefits are achieved. Because of these features, there is a growing tendency to set up individual or personal trusts on an irrevocable basis.

Life insurance trusts are a recent development in the voluntary trust field. These life insurance trusts are either funded or unfunded.

In the *funded* trust, securities with income sufficient to pay premiums on the insurance are turned over to the trustee on an irrevocable basis. The trustee then assumes the responsibility for future premiums to the extent of the income.

In the *unfunded* trust, the life insurance is made payable to the

trustee, as in the case of the funded trust, but no securities are turned over to the trustee. In other words, no immediate trust estate is established. The basis of the trust is the agreement of the insured to pay the premiums himself, and the trust estate does not come into being until his death. Most insurance trusts are of the unfunded type.

Several billions of life insurance have been trusteeed in this fashion. With more than one hundred billions of life insurance in force, however, the field has hardly been scratched. A great increase in this type of trust is anticipated.

The trust institution may serve as co-trustee in any of these trust relationships. In such cases, the duties and responsibilities may be divided among the trustees in any way desired. Generally the corporate *trustee* is given physical custody of the trust estate, with instructions to consult the other co-trustee regarding investments, distribution of income, or any matters which the trustor may desire to have on a discretionary basis. This practice relieves the co-trustee of the clerical and technical details involved in handling the trust, and secures the benefit of his personal knowledge of the trustor's desires and aims. The co-trustee plan is so flexible that it offers worthwhile advantages in the establishment of most trust funds. The appointment of a personal friend as co-trustee, with reasonable discretionary authority, should be carefully considered by persons who establish trust estates.

Liability of trustees. Trustees are held to a high standard of conduct in their dealings with the beneficiaries and the trust estate. Formerly the usual practice of a careful, prudent business man was the standard of care and diligence required in the administration of the trust. Now the tendency is to demand a considerably higher standard of performance, especially in the case of corporate trustees. Since such trustees have offered their services and secured the business as experts, the courts are inclined to insist on expert performance of the duties involved. Thus, in addition to the requirements of the "prudent man rule," the corporate trustee must intelligently and energetically discharge its duties as a professional expert, if liability is to be avoided.

Trustees are liable for damage resulting from all acts of bad faith, and from such acts as unauthorized investments and failure to segregate assets or to follow the terms of the trust instrument. Trustees are ordinarily liable for embezzlement, conversion, fraud,

and similar acts. Also, they may be held liable for negligence if they leave trust funds idle, if they do not properly safeguard the property physically and by insurance, or if they fail to dispose of investments which have lost trust investment status by removal from the *legal list* or have become unsafe.

The trustee is also held to high ethical standards, as indicated earlier in the chapter. The liabilities and responsibilities of trusteeship are indeed heavy; they cannot be assumed lightly by either corporate or personal fiduciaries.

Investment of trust funds. In most states, investments are strictly regulated by law. In the absence of specific authority in the trust instrument to do otherwise, these investments (in most states) must be restricted to the purchase of obligations defined by statute as legal investments for trust funds. These so-called "legal investments" vary greatly from state to state, but they include only those types of obligations in which greater emphasis is laid upon safety of principal than upon adequacy of income. Roughly they include: first mortgages; Federal Government, state, and municipal securities; and high grade railroad bonds. Some states have broadened the list to include the bonds of certain public utilities. The statutes usually specify the standards—of earnings, dividend record, and equity coverage—prerequisite to admission to the legal list.

While a list of the securities legal for trust investments is generally promulgated by a responsible state official, it cannot be blindly followed by the trustee. If a security is included in error, or if its status should change, there is no defense for a trustee to say that the security *was* on the legal list. The list is merely suggestive and is furnished as a courtesy. The trustee is liable if the law is not strictly complied with, regardless of the acts of a state official in compiling such a list.

Whereas legislators, as evidenced by the foregoing paragraphs, have placed little confidence in the business ability of trustees, creators of trusts often have freed their trustees of all legal restrictions by instructing them to use their own judgment. It is generally agreed that this policy enables the trust to secure a larger return with reasonable safety, since the artificial demand created for securities which qualify for the legal list causes them to sell, on the average, to yield about one per cent less than securities of comparable quality which do not qualify because of some technicality or preferential provision of the statute. This increase of one per cent

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represents in earnings for the trust an increase of twenty to twenty-five per cent, which may be safely secured by an able corporate trustee if freed from the restrictions of the legal list.

In an attempt to preserve the purchasing power of the corpus of the trust and the income from it, creators of trusts may instruct their trustees to purchase common stocks; or, the trustee may be instructed to hold the ownership and conduct the enterprises developed by the creator; or, in extreme cases, the trustee may be

FOR THE COMMITTEE ON TRUST MATTERS

JOHN DOE STEEL COMPANY

March 14, 19--

The securities of this company which we are holding in trust accounts in the total amount shown below are placed before the Committee for its consideration and instructions. Accounts which are so invested that in excess of 10% of their present value is represented by bonds or preferred stock or in excess of 5% by common stock of the John Doe Steel Company are listed below. Direction Accounts or accounts in which there is no power of sale were not analyzed.

John Doe Steel Company 1st 4^{ths} due 1957

<u>Sole Responsibility</u>	<u>Amount Held</u>	<u>Inventory</u>	<u>Market</u>	<u>Per cent of Total Present Value</u>
AT 1090 John W. Klenak (In the above account trustee may retain originals and may reinvest only in New York State municipal bonds paying 4%)	\$20,000	102	105	14 %
<u>Necessary to Consult</u>				
SAV 1864 Paul J. Urban (Sale of part of holdings disapproved October 1940)	25,000	98	105	18
AV 3016 T. Clyde McCarroll	5,000	100	105	12
<u>8% Cumulative Preferred Stock</u>				
<u>Necessary to Consult</u>				
AV 1438 Maurice J. Egan (Mr. Egan has disapproved diversification on several occasions)	500 shs.	95	111	27
<u>Common Stock</u>				
<u>Necessary to Consult</u>				
SAV 866 Claude G. Rubener (We have recommended diversification on numerous occasions and the block has recently been reduced from 1,500 shares to 1,000 shares; consent to the sale was reluctantly given.)	1,000 shs.	52	47	15

instructed to speculate and given full discretion. The trust instrument is extremely flexible and can be used to effectuate the wishes of the trust creator no matter what they may be. In all such cases, the trust agreement governs, and the trustee may completely disregard the legal restrictions on investments.

The investment of the trust funds in its care is the most important duty of the personal trust department. In the long run, the success of the institution will depend on its investment policy and practices. The problem is well nigh an insoluble one, for the

trustee has as many investment problems as it has trust accounts. Each trust account must be considered and handled separately, as the investment requirements of each will differ, in some degree at least, from the others. One trust will be established for the protection of a widow; another, for a retired business man; another, for a spendthrift heir who desires maximum income; another, for orphans of tender years—no two trusts will be identical in the services desired from their funds. The particular requirements of the beneficiaries of thousands of trust accounts must be considered in addition to the technical considerations involved in scientific investment management of the funds.

The larger trust institutions maintain a separate *trust investment division* to assist the trust officers in the investment management of personal trust accounts. While the organization chart of this department will vary with the institution, the work done is fairly uniform. It involves: (1) a statistical and financial analysis of each company whose securities are held in any trust fund in the entire department; and (2) an analysis of the holdings of each trust, to determine whether the individual requirements of the trust are being met. This plan is called the "double method of review" and is used by nearly all large corporate trustees.

These reviews are reduced to memorandum forms submitted to the trust committee for instructions as to any action to be taken. A study of the two different types of review memoranda used by the Guaranty Trust Company of New York and reproduced on pages 500 and 502 will show clearly the methods employed.

Various other clerical, mechanical, and systems methods are used in the management of trust funds. They vary so widely that they will not be detailed here. It is sufficient to say that trust funds must be under constant and close review and supervision if the trustee is to fulfill the manifold responsibilities placed on it.

In order to avoid the heavy expense of this constant supervision, some corporate trustees have tried the plan of a *commingled* trust fund. In essence, this is the creation of one large trust fund in which the smaller trusts participate on a pro-rata basis. Various methods, including separate incorporation of the large trust fund, have been used to accomplish this participation. The legal and tax basis of the commingled trust fund is not firmly established. Its resemblance to the investment trust has prejudiced the public against it. Practically as many institutions report costs increased by the plan as claim expenses reduced.

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Corporate trust department. The many fiduciary services rendered corporations are loosely grouped in a division known as the "corporate trust department." Since the need for trust and agency services to corporations, outside the centers of population,

NY 2064	FOR THE COMMITTEE ON TRUST MATTERS	March 14, 19--
<p>Guaranty Trust Company of New York and Raymond J. Lewis, Trustees under an agreement dated November 26, 1928 for the benefit of Corwin S. Scott</p> <p>Original Value - \$139,080 Approx. Present Value - 142,500 (Including R.J.Lewis Trading Stock at inventory value)</p>		
(SALE-PURCHASE- RETENTION)	---	(WE AMORTIZE)
<p>In the matter of investments the trustees are not restricted to legal securities.</p> <p>The following securities have recently been added to this account. It is suggested that they be sold provided we obtain the approval of Raymond J. Lewis, our co-trustee, as Mr. Scott is not subject to surtaxes.</p>		
<u>SELL:</u>		
<u>Principal Amount</u>	<u>Invent.</u>	<u>Approximate Market Value</u>
\$10,000 City of Dash 4 ½s due 1955	112 ½	\$ 11,250
12,000 State of Blank 4s due 1964	118	14,160
		\$ 25,410
		\$ 905
<u>PURCHASE:</u>		
\$10,000 Central Oil Co. Deb. 4s due 1950	104	\$ 10,400
10,000 Edison Co. 1st 4½s due 1956	105	10,500
4,000 Western Ohio R.R. 1st 4s due 1958 ((\$6,000 now held)	106	4,240
		\$ 25,140
		\$1,010
<p>The following securities comprising the balance of this trust appear for review. It is suggested that they be retained for the present.</p>		
<u>Principal Amount</u>	<u>Original Securities</u>	<u>Inventory</u>
\$10,000	Boe Steel Company 1st 4s due 1952	98 3/4
10,000	Northern Railway Ref. 6s due 1961	112
10,000	Western Railway General 5s due 1949	101 ½
10,000	Chicago Electric Power 1st 5½s due 1972	98
<u>Shares</u>		
300	R.J. Lewis Trading Corporation Capital Stock (Mr. Lewis requested retention on several occasions)	135
50	Southern Tobacco Co. 8% Cum. Pfd. Stock	110
50	Northern Smelting 7% Cum. Pfd. Stock	132
50	Atlantic Pacific R.R. 5% Non-Cum. Pfd. Stock	100
		Inactive
		120
		143
		95
<u>Principal Amount</u>	<u>Reinvestments</u>	<u>Inventory</u>
\$10,000	Northern Packing Co. 1st 4s due 1950	102
50 shs.	New York & Greenwich 5% Guaranteed Stock (11/21/35 Mr. Lewis requested retention)	97
		104

0939:115		

is much more limited than is that of trust and agency services to individuals, trust institutions rendering corporate trust services are ordinarily limited to specially equipped institutions in the larger cities. Most of the corporate trust activities arise from the issuance of securities by corporations. Thus the transfer of securities

in organized securities markets occasions much corporate trust activity. Likewise, corporate reorganizations and financial adjustments give the corporate trustee a great deal of business. All this means that corporate trust activities are largely confined to the big financial centers—the major part being done in New York City.

Trustee under corporate deed of trust. Corporations in need of capital pledge as security for their borrowings their credit and property by executing a deed of trust running to a trustee (usually a corporate trustee) for the benefit of the bondholders. In case of default, the trustee can proceed to sell the property without the formality of foreclosure proceedings in court (as in the case of an ordinary mortgage), or otherwise act to protect the bondholders as provided in the deed of trust.

The corporate trustee must make sure that the bonds are in proper form and are issued in accordance with the terms of the deed of trust. Before delivery the trustee authenticates the bonds by certifying on them: "This bond is one of the bonds described in the within-mentioned indenture."

The trustee, of course, assumes no liability for the repayment of the bonds. In fact, it attempts to limit its liability to gross negligence on its part in carrying out the provisions of the deed of trust.

Assignee and receiver. A corporate fiduciary may act in a trustee capacity in assignments and receiverships for either individuals or corporations. Where it holds property while a new financial plan is developed, the term *assignee* is applied.

The courts may appoint a trust institution as *receiver* to take over property under involuntary liquidation, for the benefit of creditors. A receiver is appointed by the court, in contrast to the appointment of the assignee who is named voluntarily by the distressed debtor or, at least, without recourse to the courts.

Agency services. While corporate fiduciaries render agency services to both individuals and corporations, as will be seen from the following discussion, most of these activities are performed for corporations. Thus fiduciaries act as *transfer agent* for the stock of corporations. In this capacity they keep the stock transfer book and stock ledgers, and make all transfers of stock from seller to buyer. It should be noted here that the *registrar of bonds* performs exactly the same service when ownership of registered bonds is changed. The duties of the registrar of bonds are comparable to those of the transfer agent.

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The *registrar of stock* registers the stock certificates issued by the transfer agent, and thus prevents the fraudulent and often spectacular overissues of bygone days. This service corresponds to the authentication service of the trustee of bond issues.

A trust institution may also act as *depository* (bailee) for stocks, bonds, and cash under a corporate reorganization plan or in a merger or consolidation. It may also hold escrows as an *escrow depository*.

Fiscal agency functions. Custodian accounts; secretarial services; collecting or paying agent for corporations, municipalities, foreign governments, and other borrowers—and many additional services of a similar nature—may be undertaken for both individuals and corporations.

Miscellaneous services. There are still other miscellaneous and auxiliary services which some trust institutions are willing to undertake for customers. They may act as *broker* and as *attorney in fact*. Some companies operate a *title insurance* business. A few engage in the *fidelity insurance* business. In fact, it is hard to name a financial service that no trust company would be willing to perform. Trust companies are truly the “department stores” of finance.

Questions for Study and Review

- 1 What advantages do corporate fiduciaries have over individual fiduciaries?
- 2 Explain the term “fiduciary relation.”
- 3 Name the conditions under which national banks are permitted to exercise trust powers
- 4 On a functional basis, under what headings do trust institution activities fall?
5. Define a “trust.”
- 6 Differentiate between a personal trust and a corporate trust
- 7 Describe the uses of voluntary trusts.
8. What is the difference between a funded and an unfunded life insurance trust?
- 9 For what actions are trustees liable?
10. Discuss the work of the trust investment division.
- 11 Outline the work of the corporate trust department.

Problems

- 1 On Feb. 1, 1918, A died a resident of the State of New York, and by his last will and testament created a trust with 400 shares of the X Co. capital stock, par value \$100 per share

The balance sheet of the X Co on Feb 1, 1918, shows the following:

Capital Stock	...	\$100,000
Surplus	.. . .	75,000.

On Feb 1, 1925, the following:

Capital Stock	. . . . .	\$100,000
Surplus		150,000

On Feb 2, 1925, the X Co declared a 100% stock dividend

On March 1, 1925, the trustee received 400 additional shares.

How many shares should be retained by the trustee as corpus and how many shares distributed as income to the life tenant?

2 If A had died in 1930, and the stock dividend had been declared January 1, 1937, would your answer to Problem 1 be the same?

3 A corporate fiduciary holds ten bonds bought at 90 in trust fund A. Desiring to diversify further the holdings of this trust fund, it transfers 5 bonds at 100 to trust fund B, although the market price on the day of transfer is 102. Disregarding interest, calculate the adjustments that must be made when the bank examiners disapprove the transaction.

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R. R.

CHAPTER 28

Investment Banking

Organization of investment banking. Investment banking is concerned with the transfer of capital from those that have more funds than they require for current consumption to those that would utilize for long periods of time more funds than they possess.

Commercial banking, properly so-called, is designed to provide business men and others with liquid funds to expand their working capital resources. Hence, a commercial loan is properly repayable within a short period of time, after the borrower has sold the goods he bought with the proceeds of the loan. Where business enterprises want capital for long periods, however, they have usually resorted to the security markets if they are large enough to put out stock or bond issues that will appeal to the rank and file of investors. Investment banking is concerned with the latter types of transactions.

We must distinguish, however, between the function of investment banking and the institutions that carry it on. As already defined, investment banking is long-term banking, and commercial banking is short-term banking. However, the commercial banks that were originally organized to transact a short-term lending business have increasingly, as we have learned in preceding chapters, gone into the business of lending money for long periods of time. They have made real estate mortgage loans, and they have bought government and corporate securities on a large scale. Similarly, certain institutions that were originally organized solely for investment banking purposes have gone into the business of making short-term advances, although this has been far less common than the first-mentioned trend from commercial to investment banking.

In this chapter we are concerned primarily with the institutions that transact an investment banking business, regardless of the purposes for which they were originally organized

Investment banking institutions. The institutions that are engaged in the conduct of the investment banking business in this country fall into four main groups.

The most important of these groups are the houses devoted to wholesaling and retailing investment securities. These are the middlemen, who stand between those who want to borrow or otherwise raise funds for long periods of time on the one hand, and the great mass of individual and institutional investors who want to make long-term commitments with their funds on the other. These middlemen are the nucleus of the investment banking structure, just as the commercial banks are the nucleus of our commercial banking system.

Many persons do not care to assume themselves the task of investing their money in securities. They prefer to turn over this function to some intermediate institution, such as a trust company, a mutual savings bank, or an investment trust. The latter fall under the heading of investing institutions, because they are concerned with the investment of other people's money.

A third category of institutions engaged in the investment banking business is comprised of those enterprises whose primary function is the writing of insurance or the carrying on of some other operation not directly and immediately concerned with the investment of money. However, in the conduct of this business, these institutions gather large amounts of money which they must keep invested for long periods of time, or indefinitely. Hence, they take their place alongside the investing institutions as among the leading sources of new capital for long-term investment in the community. We shall call these institutions—which include life insurance companies, fire and casualty insurance companies, churches and universities, and even many industrial enterprises that keep large amounts of investments as a reserve—institutional investors.

When a commercial banker makes a loan, he generally holds his customer's paper until its maturity. As we have seen, under unusual circumstances, this paper may be rediscounted and so turned over to a Federal Reserve bank. The rediscount is the exception rather than the rule.

In the investment banking business, on the other hand, because the stocks and bonds that represent the great bulk of such com-

mitments are outstanding for long periods, if not perpetually, the transfer of securities from original buyers is the rule rather than the exception. Hence, a complicated machinery has been developed to permit holders of securities to transfer these issues to others whenever they desire. Thousands of brokers and dealers coöperate to facilitate such transfers of ownership of already existing issues, and stock exchanges organized by these brokers for their own convenience further aid in this task. We shall call these agencies the security market institutions.

It will be seen from the chart opposite that the investment middleman, the investing institutions, the institutional investors, and the security market institutions constitute together a well articulated mechanism for the transfer of long-term capital from those who have more funds than they can use to those who need more funds than they have.

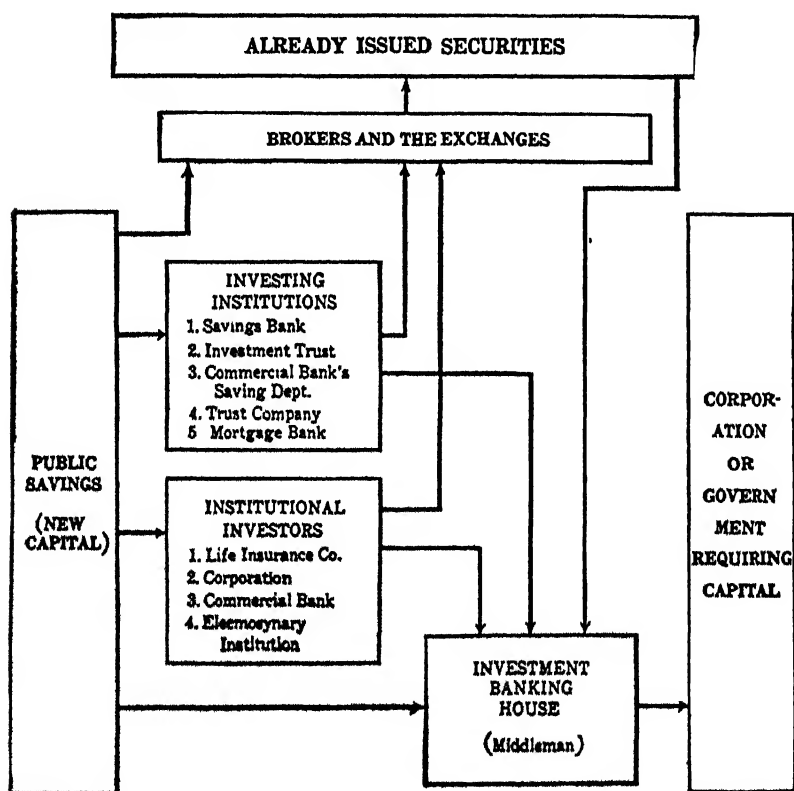
Investment middlemen. The business of originating and distributing new security issues is largely concentrated in the hands of several thousand specialized organizations of large and small size spread over the country. Most of these investment houses do a general investment banking business, dealing in all types of securities at both wholesale and retail, but some are concerned primarily with specific classes of securities such as municipal bonds.

Regardless of whether a dealer in securities does a general or specialized business, he may be classified as a wholesaler or retailer, or both. A wholesaler is a dealer who originates, or joins with other houses in a syndicate which originates, an entire new security issue. A retailer is a house that makes sales directly to investors, both individual and institutional. Many houses, especially of intermediate and larger size, do both a wholesale and a retail business.

During the '20s, the tendency in the investment banking business was for the banks of the country, and more especially the security affiliates that were organized by some of these banks and jointly controlled with them, to take over a large part of both the wholesaling and retailing of securities. This combination of commercial and investment banking within one institution was found to involve many disadvantages, however, and as an outcome of unsatisfactory experiences with bank security affiliates in the depression period, the Banking Act of 1933 provided for their abolition. Furthermore, this law provided that private bankers, such as J. P. Morgan & Co. then was, may not engage in the security business. This explains the organization of new security

houses, such as Morgan Stanley & Co., to carry on the security business formerly transacted by private bankers. Commercial banks are now restricted by law to the retailing of securities and may not act as underwriters, except for government bonds. They may also act as brokers when not otherwise prohibited from doing so.

Security middlemen make their profit out of the difference between the price which they pay for the securities they sell and that which they receive from the buyer. Because of the large measure



of risk that exists in turning over large amounts of securities at a relatively small profit margin, speed is of the essence of successful operation in this field of activity. However, the pace of financing has been slowed down by Federal legislation. The Federal Securities Act of 1933 was enacted for the purpose of requiring a full disclosure from underwriters and retailers of new security offerings. In order to insure that prospective buyers will obtain adequate information, a registration statement must now be filed with new security offerings, with the exception of Federal, State, municipal,

and a few other types of issues specifically exempted in the Act, and actual sale to the public may not begin as a rule until twenty days have elapsed after the filing of this registration statement. In addition a prospectus must be given to every buyer of the new issue of securities.

Because of the expense involved in effecting a new security flotation, only relatively large issues can be floated normally at a low cost. Therefore, the security market can be tapped for funds usually only by business enterprises of substantial size.

In order to spread the risk involved and to obtain adequate selling effort, it is usual for banking houses to join in purchase groups and selling groups to consummate new offerings and to complete their distribution without delay.

Security origination and distribution. While the procedure of investment banking is not so standardized as is, let us say, the procedure of a bank credit department in determining the line of credit to which a given customer is entitled, nevertheless, a fairly definite course of procedure has been worked out through the years. The registration and other requirements of the Federal Securities Act have tended further to standardize the process of originating and selling a new offering of bonds or stocks.

In the origination of a new security issue, the issuing corporation and the investment banker may be brought together in various ways. The investment banker or his associates may be on the board of directors of the issuer or may have had some dealings with the issuer or its directors in the past. Many issues are brought to investment bankers through commercial banking correspondents and friends. Some issues come to a banker through direct solicitation, although the average investment banker tends to be suspicious of issues which have been "shopped around" before being brought to his office. In the case of municipal, public utility, and railroad issues, the large majority of new offerings are placed through competitive bidding. The Securities and Exchange Commission and the Interstate Commerce Commission have used their authority to require competitive bidding wherever it seems practicable, to assure a higher price to the issuer.

Once a banker has distributed an issue of securities for a corporation, he usually feels that he is entitled to handle the future financing of that concern as long as he gives reasonable satisfaction. In many instances this arrangement is made more formal through executing a financing agreement or contract. The rule of invest-

ment banking is that "one good issue deserves another," and once an investment banking house has successfully floated an offering for a corporation, it feels that it should be privileged to put out additional issues as they are needed. Federal authorities have questioned such established relationships between issuing corporations and investment bankers, preferring competitive bidding.

Only a limited number of investment houses have the facilities and the connections to assure an issuer that effective arrangements can be made to dispose of new issues of securities. These houses act as originators. A larger number of houses participate in the origination of new security issues through becoming members of purchase groups headed by the houses of issue, or originator.

The purchase group does not itself bear the brunt of the effort to distribute a new issue. Instead, a much larger selling group is organized, including investment houses all over the country that possess selling organizations, so that institutional and individual investors can be reached everywhere with a minimum of delay. The selling group does not underwrite, so that if any member of the selling group cannot sell a given amount of securities, he does not have to take them over and pay for them. The underwriting function is performed by the purchase group.

The members of the selling group receive a commission on all sales made by them that are confirmed by the purchase group manager.

The actual offering. After an issue has been registered with the Securities and Exchange Commission, assuming that it does not fall in the category of exempt issues, it may be offered publicly on or after the expiration of a twenty-day waiting period if the effective date of the registration statement is not held up by the SEC. In certain cases, the SEC may permit registration to become effective within a shorter time. In individual States, it is necessary to conform to the provisions of State security laws, known as "blue sky laws," before proceeding with the actual sale of the issue.

When an issue is offered publicly, advertisements usually appear in the newspapers, and those who are prospective purchasers receive copies of the prospectus giving many pertinent details about the security. Orders are received by members of the selling group, who pass them on to the group manager, who is generally the originator of the issue. The syndicate manager then compiles all these orders or subscriptions, which legally have the status of offers to buy the proffered issue. When sufficient subscriptions have been

received, the books on the offering are said to be closed. If it is oversubscribed, allotments are made, subscribers in such event receiving only a fraction of the amount of the security for which they subscribed.

If the issue is of large size, trading may begin on the over-the-counter market on a "when, as, and if" basis immediately after the offering. It is general practice for the syndicate manager to stabilize the price of the issue for a time after the public offering by placing an open bid in the market at the public offering price, so as to facilitate the process of its distribution. Should the issue decline in the market immediately after the offering, it would become almost impossible to continue the process of selling it through the dealers all over the country who constitute the selling group. Members of the selling group as well as the purchase group are barred by the terms of the group agreement from selling the securities below the public offering price until these syndicates have been dissolved. However, this agreement is difficult to enforce, and when an issue does not sell readily, the securities may appear at price concessions in what is called an "investment guaranteed" market, where sales are made below the public offering price to those who agree not to resell the issue, and so to bring it back to the syndicate manager, before the expiration of the syndicate. The Department of Justice has questioned the legality of price maintenance agreements under the anti-trust laws.

Bonds repurchased by the syndicate manager in his pegging operations are usually traced by their numbers to the member of the selling group or purchase group to whom they were originally delivered. This house must then absorb any loss involved. The fact that bonds allotted to it were repurchased also reacts unfavorably upon its reputation as an efficient and successful distributor of securities.

The security salesman. The ultimate link between the issuers of securities and individual and institutional investors is the security salesman. Because investment banking is primarily the business of merchandising long-term bonds and stocks, a greater sales effort is required than is the case with the sale of commercial banking services. At least, that has been the case in this country, where the security salesman plays a far more important rôle than elsewhere.

In Great Britain, for example, it is usual for the investor to come to his broker and consult with him on his purchases, just as he

would call upon his physician or dentist for professional service. In the United States, on the other hand, the typical investment house employs a corps of salesmen who go forth to contact investors and make sales to them. It may well be that the business of distributing investment securities will display fewer high-pressure characteristics in the future than in the past, particularly since it has been brought under much closer Federal regulation, and civil and criminal liabilities are imposed for misstatements of material facts. However, there is little reason to doubt that outside salesmen will remain an important factor in the sale of investment securities, particularly to individuals.

At the same time, however, increased emphasis is being placed upon giving statistical and economic advisory service to customers. Competition among investment dealers to serve a clientele that is becoming increasingly enlightened tends to bring this about. The trend of recent years in larger investment houses has been toward employing relatively more statisticians and fewer salesmen.

The security salesman, of course, often tries to give a good deal of service, himself, in an effort to hold his clients and gain others. However, the question is raised whether a salesman eager to sell particular issues is well qualified to give impartial and worth-while advice to clients. Doubtless some individuals are able to do this, but by and large there has been a tendency to separate the selling from the advisory functions. In some cases, in fact, investment houses have established separate divisions to perform these two services, and make a point of stressing the autonomy of investment advisory and management departments from their selling departments.

Private placements. A considerable proportion of new financing by corporations in recent years has been effected by private placements, rather than public issues. A private placement is the sale of an issue of securities, usually bonds or preferred stock, directly by the issuer to one or a few financial institutions. The middlemen—security wholesaler and retailer—are thereby eliminated in the raising of long-term capital, although sometimes an investment banker may negotiate the private placement and receive a flat fee for doing so.

Corporations that resort to private placements not only expect to get a higher net price for their securities, but also can conclude the transaction more speedily. Registration under the Securities Act often is not necessary where a private placement is made with

only a few buyers, although such registration may be effected to enable the institutional buyers to resell the securities to others at a later date, if they so wish.

There are some disadvantages to the issuer in private placements, however. For example, should bond prices subsequently decline he cannot repurchase his obligations at a discount for retirement, as could be done if the issue were traded in the market following a public distribution.

Investing institutions. The process of investing money in this country is conducted in the main not by individuals for their own accounts, but by financial institutions that specialize in the function of investing other people's money. Among these institutions, the largest volume of buying power is controlled by the trust companies.

The trust companies are peculiar in that they give an individualized investment service. They segregate the assets of each client, and manage his funds and property separately. A very large proportion of the funds managed by trust companies comes from testamentary trusts, which are set up under wills and go into effect on the decease of the testator. In addition, they accept personal trusts and custodian accounts, which are conducted during the lifetime of the owner.

While trust companies do not announce the volume of funds they manage for others, and it does not show up in their statements, it has been variously estimated that 30 to 50 billion dollars of securities and other property are under the management of American trust companies at any one time. Naturally, the ability and the willingness of trust companies to buy a particular security play a very important rôle in determining the demand it will encounter when it is offered for sale.

The nature of the investment functions performed for their customers by trust companies was discussed in greater detail in Chapter XXVII.

Next in importance among investing institutions are the savings banks, which operate on an entirely different principle. Instead of segregating the investments of each client, as does the trust company, the savings bank commingles the funds of many thousands of individual investors, from whom it receives funds that assume the form of a time deposit. The savings bank, by promising to repay the deposit in full, thus guarantees that the investor's principal will remain intact, something that a trust company cannot do.

As we have already seen, the business of savings banking is conducted in this country both by mutual savings institutions, operating under separate laws, and commercial banks which maintain savings or special interest departments. The Comptroller of the Currency reported that all banks in the United States held \$25,487,000,000 of savings deposits on June 30, 1942, represented by 45,417,000 pass books.

Another important type of investing institution that has evolved more recently, and so controls only a fraction of the volume of resources managed by trust companies and savings banks, is the investment trust. There are several types of such institutions. The *general management investment trust* is a corporation which raises money by selling its own bonds and stocks, and invests the proceeds in a diversified list of securities. It is far more flexible than a trust company or savings bank, not being restricted as to the purchase of securities except by rules set up by itself. Also, by issuing bonds, preferred stock, and common stock, it offers investors several alternative methods of participating in it. However, investors who wish to withdraw must find buyers for their investment trust securities, and their sale may be possible only at sharp discounts under adverse market conditions.

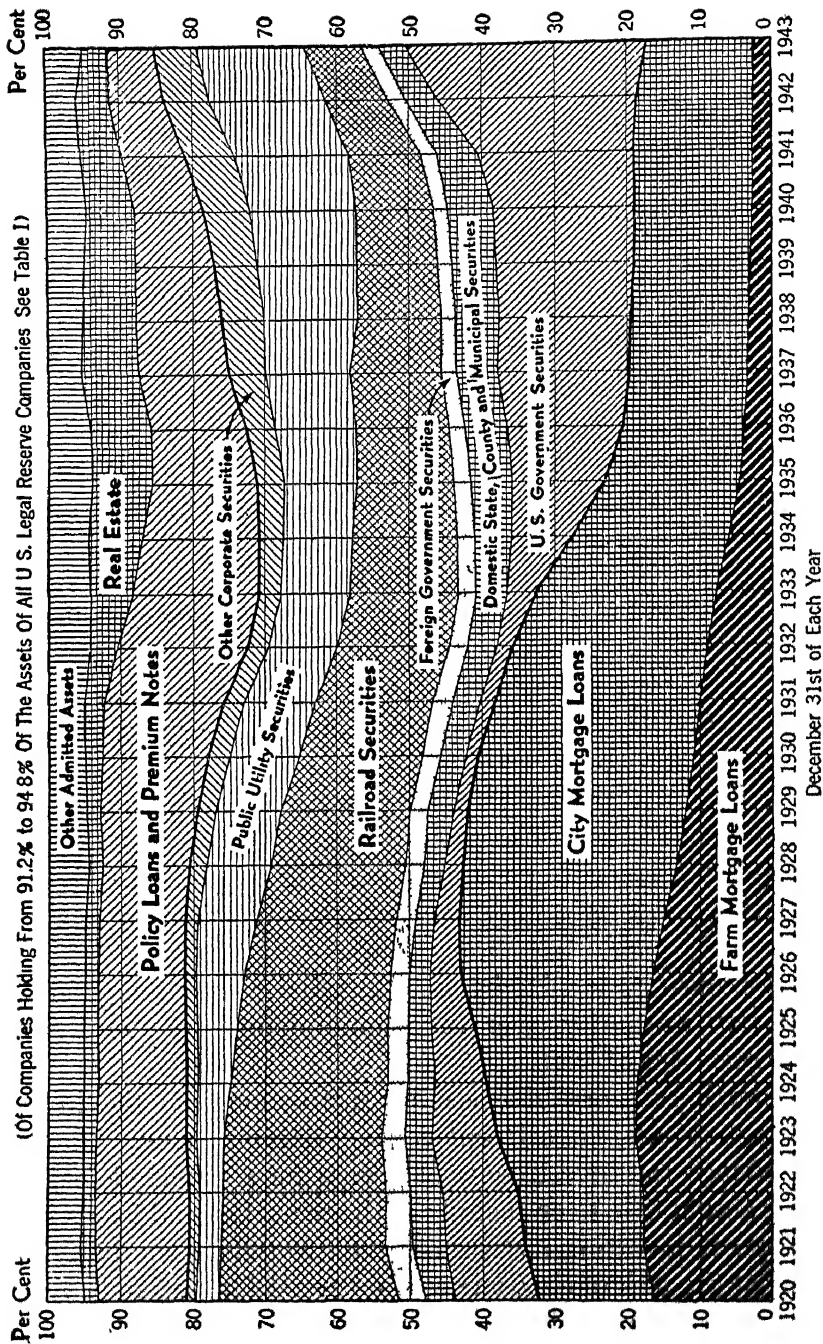
The *fixed investment trust* represents a fractional participation in a block of stocks. The *mutual investment fund*, likely to be the most popular type of investment trust for the future, sells one class of participations in a fund from which investors may withdraw at will.

The Securities and Exchange Commission has been given limited regulatory authority over investment trusts by the Investment Companies Act of 1940.

A fourth category of investing institutions are the investment management and investment counsel organizations. These agencies manage the investments of clients for a specified fee, without taking actual title to or custody of the securities and funds involved.

All these investing institutions seek to relieve the individual investor of the task of choosing commitments for his funds by shaping broad investment policies and choosing particular securities. In the case of savings banks and investment trusts, they also give the investor, especially the small investor, far more diversification in the investment of his money than he could obtain if he had to invest his own money individually. Each person, in deciding whether or not to utilize the services of these institutions, must decide to what

RELATIVE GROWTH OF LIFE INSURANCE ASSETS—1920-1943



extent he needs them and whether or not he pays excessively for the services he is offered.

Institutional investors. The category of institutional investors is a very broad one, and it shades off only gradually from that of the investing institutions just discussed.

The most important among them are the life insurance companies. Under the system of life insurance that is now in general use, the insurance companies accumulate large reserves against most of their policies. In the aggregate, against a total of more than 140 billion dollars of life insurance that is outstanding in this country, the life insurance companies hold about 38 billion dollars of reserves. These vast resources were invested in securities, real estate mortgages, and otherwise as follows, at the end of 1943 (for 49 companies, holding 91 per cent of all insurance company assets, reporting to the Association of Life Insurance Presidents):

Farm mortgages	\$ 750,000,000
Other mortgages	5,150,000,000
U. S. Government bonds	11,500,000,000
State, county, and municipal bonds	1,190,000,000
Canadian Government bonds	855,000,000
Other foreign government bonds	6,000,000
Railroad bonds and stocks	2,760,000,000
Public utility bonds and stocks	5,040,000,000
Other bonds and stocks	2,045,000,000
Policy notes and premium loans	2,085,000,000
Real estate	1,210,000,000
Collateral loans	9,000,000
Cash	1,100,000,000
Other admitted assets	700,000,000
Total	\$34,400,000,000

The life insurance companies of the country receive in premiums and in income from their investments annually more than a billion dollars in excess of what they pay out on account of payments to beneficiaries of life insurance policies. As a result, they are a mainstay of the capital market, constituting a steady source of demand for new securities.

Another very important group of institutional investors are the commercial banks, which invest demand as well as time deposits in securities. As commercial loans have played a declining rôle, the banks have turned to the purchase of bonds and, to a lesser degree, mortgages, as we have seen, in order to obtain a profitable outlet for their funds. As a result, apart from the securities they purchase against their time deposits, many commercial banks now invest a part of their demand deposits also in securities.

Another important category of institutional investors are the eleemosynary institutions, including churches, universities, hospitals, and charitable foundations, which in the aggregate possess almost ten billion dollars of endowment and other resources. A large part of this enormous aggregate is invested in securities, so that these philanthropic agencies have become important factors in the capital market.

Business enterprises often keep extensive liquid reserves on hand, over and above their ordinary requirements for working or fixed capital purposes. In many instances, such surplus funds are invested in securities. In the aggregate, industrial and commercial enterprises hold many billions of dollars of marketable securities as liquid reserves, chiefly United States Government. When a business enterprise invests its surplus resources in this way, it actually becomes an investment trust to that extent.

Security market institutions. The business of buying and selling already-issued securities, one of the most important functions performed by the country's investment banking machinery, is now conducted chiefly in two ways. First, a limited number of securities, mostly the better known and larger issues, are listed upon one of the twenty large stock exchanges in the country, of which by far and away the most important is the New York Stock Exchange. Public buying and selling orders are executed on these exchanges by member firms in accordance with established rules of the exchange and at standard commission rates. Most exchange members act merely as *brokers* for their customers, although in a number of cases they may trade for their own account, and thus act in the capacity of *dealers*.

A very much larger number of security issues, including both the great mass of small and obscure issues and securities of such enterprises as commercial banks that do not care to have their stock listed on exchanges, are traded in over-the-counter. Over-the-counter houses as a rule transact business as dealers, buying and selling for their own account. For this reason, a security is quoted over-the-counter on the basis of its bid and asked price (for example, 34 @ 36). This means that the over-the-counter dealer stands ready to buy at 34 and sell at 36.

Both the listed and unlisted markets perform important functions in our economic machinery. On the listed market it is usually possible to make closer markets. Also, it is easier to transact a large volume of business efficiently and quickly. On the other

hand, in numerous smaller and more obscure issues in which there is limited public interest, over-the-counter dealers, because they stand ready to take positions on their own account, may assure a closer market.

The brokerage mechanism is now subject to detailed regulation under the Securities Exchange Act of 1934. This very important statute seeks to accomplish chiefly the following:

(1) It subjects stock exchanges and their members to regulation by the Securities and Exchange Commission. Other brokers and dealers are regulated indirectly through the National Association of Security Dealers, and directly by broad rules promulgated by the SEC.

(2) It requires registration statements to be filed for listed issues, thus assuring to the public a minimum of pertinent information.

(3) It prohibits manipulation of security prices and subjects the pegging of quotations to regulation, thus protecting the public against artificial control of prices that may prove detrimental to the interests of the buyers and sellers.

(4) It gives to the Governors of the Federal Reserve System control over margin requirements on security loans to prevent the expansion of security loans to dangerous proportions. An excessive volume of such loans was found to undermine both the stability of the security markets in particular and the credit and business structures of the country in general by the experience before and after the great security boom that culminated in 1929.

By its Regulation T applicable to loans by brokers on registered securities, and Regulation U applicable to bank security loans made to purchase or carry such issues, the Board of Governors of the Federal Reserve System in 1937 set the maximum of loans to customers at 60 per cent of the market value of the collateral. When the collateral value falls so that the customer's margin drops below 40 per cent, withdrawals of cash or securities and new purchases that increase a customer's debit balance are barred. In 1945, the maximum loan value was first cut to 25 per cent, making the minimum margin requirement 75 per cent, and in the following year the Board of Governors eliminated the loan value to make margin requirements 100 per cent, as part of its anti-inflation program at the time.

(5) The Act also seeks to regulate the relations between "insiders" and "outsiders" through requiring officers, directors, and owners of 10 per cent of any class of securities in corporations whose

shares are listed on an exchange to report monthly any changes in their ownership of such shares. The law further requires that such holders may not sell these shares short, and that any profit they make out of selling such stock within six months after they have purchased it may be recovered by the corporation.

Financing smaller business. Large corporations, it has been contended, have an undue advantage over their smaller competitors because they enjoy ready access to the security markets. Because bond or stock issues of relatively small size often cannot be sold except at prohibitive cost, it has been urged that the Government should help to provide agencies that would buy such issues on a reasonable price basis. This applies especially to stock issues, since smaller businesses can borrow from the banks for relatively long periods.

Industrial mortgage banks have been set up in other countries to provide long-term capital to smaller enterprises. The need, however, is not so much for a lending institution as for an agency that would buy stock issues, preferred or common, and so provide true venture capital for concerns that cannot sell such issues through existing investment banking channels at moderate cost because of the heavy expenses incurred in the origination and distribution of an issue of, say, \$100,000, or less of corporate stock.

An agency to provide equity or venture capital to smaller enterprises can be launched by the Government, or by private capital, with or without Government assistance.

The rôle of the investment banker. Regardless of the section of the whole broad field of investment banking in which a given investment banker operates, he contributes to the performance of the basic function. He helps to direct and facilitate the flow of long-term capital to various government bodies and corporations. While the investment banking machinery must constantly gear itself to the preference of individual investors and investing institutions, it can also influence this preference to a considerable extent.

As the country grows in wealth and as the volume of savings increases, the size of the investment banking machinery correspondingly expands. Also, as the various institutions that make up the machinery base their operation increasingly on competent research, they can perform this function more effectively and soundly. While there has been evident a growing tendency for the government to regulate and control this function, which until recent years was subject to very little government supervision because it was

held to concern primarily a few wealthy persons who could be trusted to watch their own interests, this changes the form but not the substance of the investment banking business. With the enactment of Federal legislation affecting investment banking in 1933 and 1934, it is true, a new era opened up for the investment banking business, and the full effects of such increasing government intervention are yet to be seen. As long as governments and corporations continue to raise large amounts of money through the sale of securities, however, and as long as a large proportion of the national income is saved, investment banking will remain a major financial activity in the United States.

Questions for Study and Review

1. Outline the basic organization of American investment banking.
2. Which are the chief investment banking institutions in this country?
3. Differentiate between wholesale and retail investment houses
4. How does the Federal Securities Act of 1933 affect the offering of a new issue of securities to the public?
5. Why is the quotation of a new issue of securities generally pegged for a period immediately after offering?
6. Why do many corporations have established investment banking connections?
7. What is the rôle of investing institutions? How do you appraise whether any such institution is worth while from the investor's standpoint?
8. Describe the three chief types of investment trusts.
9. What are the chief investments of life insurance companies?
10. What is the rôle of the brokerage mechanism? How does the Securities Exchange Act of 1934 affect the functioning of this part of our investment banking machinery?
11. What is the basic economic function of the investment banker?

Problems

1. The General Manufacturing Co. wishes to build a new plant, and seeks to raise \$3,000,000 through a preferred stock or bond issue for the purpose. How would you advise the company to proceed in raising this money? How will existing Federal security legislation affect the transaction?
2. The Sewall Manufacturing Co. plans to raise \$10,000,000 through a bond issue. What kind of house may be expected to handle such an issue? Describe the wholesale and retail syndication involved.
3. William Smith complains that he expends too large a portion of his income on insurance premiums, so that he does not have anything left for savings. Do you think his line of reasoning is correct? If not, how would you correct him?

4. John Jones buys 100 shares of United States Steel on margin at 70. How much margin must he put up as a minimum? What happens if Steel goes down in price?

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J. I. B.

CHAPTER 29

The British Banking System

The Bank of England. The Bank of England is the oldest central bank in the world and, prior to the First World War, was the mainstay of the international gold standard. Even when a private corporation and practically unrestricted by law, its policies were often to a large extent determined by the Treasury.

In consideration of a loan of £1,200,000 at 8 per cent to the Government of William III, a group of private bankers was granted by an act of Parliament and a Royal Charter on July 27, 1694, the right to organize a joint-stock company for doing business under the name of "The Governor and Company of the Bank of England." This is still the official name of the Bank. The loan was repayable at the expiration of the twelve-year charter. Subsequent extensions of the charter coincided with additional loans by the Bank to the State, so that the debt of the latter to the Bank amounts at present to £11,015,100. The Bank Act of 1844 extended the charter for an indefinite time, subject to termination on a year's notice and the repayment of the debt owed by the State to the Bank.

The Peel Act. In 1844 the Bank Act (Peel Act) was passed, and its provisions still regulate most of the operations of the Bank of England. The Act gave the Bank of England the exclusive right to issue notes, subject to the then existing note-issue privileges of the country banks. The volume of notes of the country banks was limited and, in case any bank was amalgamated with a non-issuing joint-stock bank or increased the number of its partners to more than six, its note-issue privilege ceased. The Bank of England was entitled to increase its fiduciary issue by two-thirds of the total of the lapse issue. Gradually, the note-issue privilege of the other

banks lapsed, and the fiduciary issue of the Bank of England had increased by 1923 to £19,750,000.

By the Peel Act the Bank of England was divided into two departments: the Banking Department and the Issue Department, the sole function of the latter being the routine matter of issuing notes. Under this Act, circulating notes, with the exception of the fiduciary issue, had to be secured 100 per cent by gold. The smallest denomination of notes issued by the Bank was £5. By the same Act the Bank was compelled to buy all the gold that might be offered to it at the fixed price of £3. 17. 9 and sell at £3. 17. 10½ per standard ounce.

Currency and Bank Notes Act. The Currency and Bank Notes Act, passed on August 6, 1914, granted to the Treasury the authority to issue currency notes in denominations of £1 and 10s, leaving the amount and manner of the issues to the discretion of the Treasury. The Treasury currency (Bradburies) superseded the gold sovereign, which disappeared from circulation. The joint-stock banks also transferred to the Bank of England the gold reserves which they customarily kept as part of their cash reserves in their own vaults, and replaced them with the new currency notes.

During the First World War, the Bank Act was virtually suspended, and England was forced to abandon the gold standard.

Return to gold. The Gold Standard Act of May 13, 1925, introduced the gold bullion standard. The Bank of England was relieved of the obligation to redeem its notes in gold, but was required to sell gold in quantities of 400-ounce bars or more at £3. 17. 10½ per ounce troy of standard fineness and to buy gold at £3. 17. 9 per ounce. The Gold Standard Act abolished the free coinage of gold.

An Act of 1928 amalgamated the two types of notes in circulation and fixed the fiduciary issue of the Bank at £260,000,000. This figure was approximately the combined amount of the actual maximum fiduciary issue of Bank of England and Treasury notes outstanding in 1927. The law, however, provides that the Treasury may permit a reduction or increase of the fiduciary issue by a stipulated amount for a period not exceeding six months, the privilege being renewable for successive similar periods. The Treasury minutes authorizing an increase in the fiduciary issue must be laid before both Houses of Parliament, and any series of renewals by the Treasury may not be extended beyond two years, except as otherwise determined by Parliament. All currency notes outstanding on November 22, 1928 (£280,000,000) were transferred to the Bank

and amalgamated with the Bank of England notes. The Bank of England was authorized to issue £1 and 10s notes, which are legal tender to any amount. The Act also empowered the Bank to demand the surrender of gold owned by residents in Great Britain in amounts over £10,000 at its statutory buying price. Gold owned by foreigners not residents in Great Britain was exempt from this provision.

The fiduciary issue was increased on August 1, 1931, to £275,000,000 in order to cope with abnormal demands on the Bank of England caused by the banking crisis in Central Europe. The Currency and Bank Notes Act, 1939, which became effective March 1, 1939, raised the standard fiduciary issue to £300,000,000. The powers of the Treasury to authorize changes in the fiduciary issue remained unaltered. Following the declaration of a state of war on September 3, 1939, the fiduciary issue was increased to £580,000,000.

Abandonment of gold. As a result of the financial crisis brought about by rapid withdrawal of foreign funds from London, Parliament voted on September 21, 1931, to abandon the gold standard by relieving the Bank of England of the obligation to sell gold at a fixed price.

While the Bank of England was released from the obligation to redeem its notes in gold, no embargo was then or later placed on gold exports. This policy is in contrast to the war-time suspension, when gold exports were prohibited but convertibility of the currency into gold at home was theoretically maintained, and differs from that of most other countries, where the suspension of the gold standard usually means an embargo on gold exports besides inconvertibility of notes. Since the suspension of convertibility automatically precludes withdrawals of gold from the bank of issue, the imposition of an embargo on gold exports is ostensibly intended to prevent the shipment abroad of hoarded and newly mined gold. Great Britain deliberately abstained from the measure and maintained the freedom of gold exports, and thus retained the world gold market in London. At the same time, the monetary gold stock of the country was protected by relieving the Bank of the obligation to sell gold at a fixed price. On September 5, 1939, however, the free gold market was suspended, and the Bank of England became the sole buyer of gold.

Organization and operation. The Bank of England passed to the ownership of the British Government under the terms of the Bank of England Act, 1946, which received the Royal Assent on

February 14. On March 1 the Bank began operations as a Government institution. The Bank is at liberty to engage in almost any kind of transaction; the one limitation, contained in the Tonnage Act of 1694, was that the Bank "is to be debarred for all time from using any of its funds in dealing in merchandise or wares of any description." Such restrictions on the operations of the Bank as do exist are self-imposed and may be changed or removed at the discretion of the court (directors) of the Bank. The Bank publishes only a weekly statement, and no other information about its activities has been made available.

The Bank is administered by a board (court) of 16 directors, a governor, and a deputy governor. The governor, the deputy governor and other members of the court of directors are appointed by the King. The "court" meets once a week, at which time the weekly statement of the Bank is drawn up and changes in the Bank rate are decided upon. On exceptional occasions, the Bank rate has been changed by the governor without convening the "court," which ratifies the change at its next meeting.

The Treasury may from time to time give such directions to the Bank as, after consultation with the Governor of the Bank, it thinks necessary in the public interest. Subject to any such directions, the affairs of the Bank are managed by the court of directors in accordance with such provisions (if any) in that behalf as may be contained in any charter of the Bank for the time being in force and any by-laws made thereunder.

The Bank, if it thinks it necessary in the public interest, may request information from and make recommendations to bankers, and may, if so authorized by the Treasury, issue directions to any banker for the purpose of securing that effect is given to any such request or recommendation—provided that: No such request or recommendations shall be made with respect to the affairs of any particular customer of a banker; and before authorizing the issue of any such directions the Treasury shall give the banker concerned, or such person as appears to them to represent him, an opportunity of making representations with respect thereto.

The Bank return. The first Bank return after the passage of the Currency and Bank Notes Act of 1928 is shown on page 527. A brief description of the individual items which appear in the weekly return follows:

(A) **Issue Department.** *Notes in circulation* consist of notes in the hands of the public and in the vaults of the banks, and notes

FIRST BANK RETURN UNDER THE CURRENCY AND BANK NOTES ACT, 1928 Return for Week Ended Wednesday, November 28, 1928,

IS-UE DEPARTMENT

<i>Liabilities:</i>		<i>Assets</i>	
<i>Notes issued:</i>			
In circulation	£367,001,145	Government debt	£ 11,015,100
In banking department	52,087,797	Other Government securities	233,568,550
		Other securities	10,176,193
		Silver coin	5,240,157
			<hr/>
		Amount of fiduciary issue	£260,000,000
		Gold coin and bullion	159,088,945
			<hr/>
			£419,088,945
			<hr/>

BANKING DEPARTMENT

<i>Liabilities.</i>		<i>Assets.</i>	
Proprietors' capital..	£ 14,553,000	Government securities	£ 52,180,327
Res.	3,254,001	Other securities*	
Public deposits*	21,452,051	Discounts and advances	£13,586,293
Other deposits.**		Securities	20,214,855
Bankers'	£62,379,409		
Other accounts.	37,185,203	Notes	52,087,797
Seven-day and other bills***		Gold and silver coin	757,041

* Including Exchange, Savings Banks, Commissioners of National Debt, and Dividend Accounts.

** The division in "Bankers" and "Other accounts" is a readoption of the Bank Return form used many years ago

*** Discontinued September 1 1931

held as cover for the excess note issue of the banks in Scotland and Northern Ireland over and above their fiduciary limits as prescribed by Parliament. Notes held by the Banking Department are not in circulation; they represent the difference between the total amount of notes issued and the amount in actual circulation. The assets held as cover against notes are divided into two parts. (a) the fiduciary portion and (b) gold. The fiduciary portion of the note issue is backed chiefly by Government securities and by an amount of silver coin which may not exceed £5,500,000. The type of securities held by the Issue Department is left to the discretion of the Bank. Income derived from these securities is applied to meet expenses in connection with the printing, issuing, and canceling of notes, and the balance is turned over to the Treasury as public revenue.

Government debt represents the aggregate of loans made directly by the Bank to the Government.

Other Government securities consist of Government bonds, Treasury bills, etc., while *Other securities* include commercial bills, bonds, stocks, and foreign exchange. Both classes are bought and sold in accordance with the Bank's policy. While each of these two items is subject to change from week to week, the total remains practically stable, except when the fiduciary limit is altered.

Gold coin and bullion represents the monetary stock of gold of the Bank of England and constitutes the 100 per cent cover which must be maintained against notes issued in excess of the fiduciary issue.

The Currency and Bank Notes Act, 1939, provided for a weekly valuation at current prices of the gold (carried theretofore at the statutory price of 77s. 9d. per standard ounce 11/12 fine) and securities held by the Issue Department. The necessity of making corresponding changes in the volume of currency in circulation because of the revaluation procedure was eliminated by the provision whereby the difference between the value of the assets and the amount of notes outstanding is transferred from the Issue Department to the Exchange Equalisation Account or from the Account to the Department. On September 6, 1939, the Issue Department transferred all but about £100,000 of its gold to the Exchange Equalisation Account, and the fiduciary issue was raised to £580,000,000.

(B) *Banking Department.* The Banking Department is the operating division of the Bank and functions in many respects as a commercial bank. It acts as fiscal agent for the British Govern-

ment, receives as *Public deposits* the revenue collected all over the country, manages the accounts of the National Debt, issues Treasury bills for the Government, and makes advances to the Government on "Ways and Means" when expenditure temporarily exceeds revenue.

Bankers' deposits represent exclusively the balances of British banks whose main business is conducted in Great Britain. These balances constitute a part of the cash reserves of the depositing banks, and their importance in the credit structure of the country is similar to that of the balances of the member banks with Federal Reserve banks in the United States. Although no legally fixed reserve requirements exist, the banks maintain balances with the Bank of England equivalent on the average to about 5 per cent of their deposits, and any change in the money market is reflected in this item. An increased demand for funds results in a decrease in bankers' deposits, which in turn forces the joint-stock banks to call loans from the market.

Other accounts include the balances of British banks operating chiefly in the Dominions (including the Bank of Ireland) and in foreign countries; the balances of foreign central banks, colonial banks, merchant bankers, and other financial houses; and the deposits of the Indian and Colonial Governments, of British municipalities, and of private citizens. The Bank pays no interest on deposits.

The *Seven-day and other bills*, also called *post bills*, were promissory notes issued by the Bank of England in amounts from £10 to £1,000 payable at seven days' sight to a specified payee or to order. A relic of early years, they were devised by the Bank of England "so that in case of the mails being robbed, the proprietor might have time to give notice thereof."

Government securities consist of direct obligations of the British Government, "Ways and Means Advances" to the Treasury, and Treasury bills acquired by the Bank on its own initiative and not offered to it for discount. Through the purchase and sale of government securities the Bank of England carries on its open market operations.

Discounts and advances represent Treasury bills and bills of exchange discounted at the Bank at the initiative of its customers, and loans made by the Bank to the bill brokers and private customers.

Securities comprise miscellaneous securities and commercial bills,

domestic and foreign, bought by the Bank on its own initiative. This item also includes deposits kept with foreign central banks and the Bank for International Settlements, and advances made to foreign banks of issue.

Notes represent the Bank's own notes which, together with the "Gold and silver coin" consisting almost entirely of silver coin, constitute the cash on hand—called the "reserve"—of the Banking Department. The "reserve" represents merely cash on hand maintained to meet any increased demand for currency and has no relation whatever to the convertibility of the notes. Prior to the Act of 1928, there were no legal provisions stipulating a definite procedure whenever a sudden demand for currency arose. The Issue Department could lawfully issue notes only against gold, but it is obvious that gold cannot always be imported as fast as the demand for notes may arise. This inelastic currency system functioned satisfactorily under normal economic and financial conditions; however, in a crisis, there would be an increased demand for legal tender money which could be met only through increasing the fiduciary issue. On four occasions after the passage of the Bank Act of 1844 (1847, 1857, 1866, and 1914) the Bank of England was confronted with a demand for notes exceeding the Bank's gold holdings and fiduciary limit. The situation was met in each case by "suspension" of the Bank Act; that is, the Government granted the Bank power to issue notes in excess of the fiduciary maximum, without interfering with the principle of convertibility. This lack of elasticity was remedied by the Act of 1928, which enables the Bank to increase its fiduciary issue, with the permission of the Treasury.

The "proportion." The ratio of notes and gold and silver coin held by the Banking Department, or the "reserve," to its deposit liabilities (public and other deposits) is called the "proportion." It is analogous to the cash ratio of any commercial bank, but since the country's credit system depends on the liquidity of the Banking Department, the "proportion" is a considerably higher percentage than the customary bank ratio. The "proportion" is not prescribed by law, but under fairly normal conditions is not permitted to fall below 30 per cent. As a matter of fact, up to 1914 the average was around 43 per cent. From 1914 to 1927 the average proportion ranged from 14 per cent to 34 per cent. From 1927 the proportion kept on increasing, and in the last week of February, 1930, it reached 65 $\frac{13}{16}$ per cent, the highest point since 1896.

After that time the proportion decreased and at the end of August, 1939, amounted to 21·3 per cent.

Wartime developments: The Bank of England. Since the outbreak of World War II, the monetary and credit policies have been centered in the Treasury; and the Bank of England, like the central banks of the other belligerent countries, has become merely the instrument through which the adopted policies are executed. The Chancellor of the Exchequer is obviously interested in financing the war as cheaply as possible. This necessitates an abundant supply of funds, which in turn depends on the credit-expansion power of the clearing banks. The latter by tradition maintain a 10-11 per cent ratio of cash (currency in the tills plus deposits with the Bank of England) to deposits. It is the function of the Bank of England to provide an adequate cash reserve for the clearing banks. Hence, the purchases of Government securities by the Bank of England since the beginning of the war have not been undertaken as a direct participation in financing the war deficits, but rather for the purpose of supplying the growing demand for currency and broadening the credit base of the country.

The striking change in the balance sheet items of the Bank of England is the practical disappearance of gold and the sharp increase in the fiduciary issue. The increase in the holdings of Government securities by £1,186,961,000 during almost six years of war corresponds approximately to the rise in the fiduciary issue and in bankers' deposits.

The vast increase in the amounts received and paid out daily by the Treasury causes disturbances in the equilibrium between bankers' deposits and Government (Public) deposits at the Bank of England. The latter, through open-market operations, endeavors to adjust the daily fluctuations and maintain bankers' balances on an even keel. These open-market operations are purchases and sales of securities undertaken for the investment and disinvestment of resources accumulated by Public Departments. When public deposits are low, bankers' deposits are usually high, and the banks are in need of investments. The agent of the Bank of England then makes available to them securities held by the Public Departments. Such operation benefits both the Public Departments and the banks, since it replenishes the balances of the Departments and provides an outlet for the surplus funds of the banks. When bankers' balances are low, the procedure is reversed; the agent of the

Bank of England buys Treasury bills from the banks for account of the Public Departments.

BALANCE SHEET ITEMS OF THE BANK OF ENGLAND

(in thousands of pounds sterling)

<i>Issue Department</i>	<i>August 30, 1939</i>	<i>August 8, 1945</i>	<i>+ Increase - Decrease</i>
Notes in circulation	529,499	1,323,842	+ 794,343
Notes in banking department	33,512	26,406	- 7,106
Government debt and securities	295,816	1,349,315	+1,053,499
Other securities	3,471	673	- 2,798
Silver coin	713	12	- 701
Gold coin and bullion	263,011*	248†	- 262,763
Fiduciary issue	300,000	1,350,000	+1,050,000
<i>Banking Department</i>			
Deposits. Public	31,068	15,004	- 16,064
Bankers'	90,143	203,092	+ 112,949
Others	38,976	53,501	+ 14,525
Government securities	113,126	246,588	+ 133,462
Other securities	24,629	13,652	- 10,977
Discounts and advances	6,388	2,313	- 4,075
Gold and silver coin	738	605	- 133
<i>Both Departments:</i>			
Government debt and securities	408,942	1,595,903	+1,186,961
Notes in circulation and deposits	689,686	1,595,439	+ 905,753
"Proportion"	21.3%	9.9%	
Ratio of gold to notes in circulation and deposits	38.13%	.0155%	

* At 158s 6d per fine ounce

† At 172s 3d per fine ounce.

Open-market operations. The war credit policy of the Bank of England, aimed at providing an adequate credit base for financing the war deficits, introduced a new technique in open-market operations. The novel procedure constitutes an important departure from the old-established tradition that the clearing banks do not rediscount or sell bills they have discounted, and that they have no direct contact with the Bank of England in discounting or rediscounting. The new method was employed first in April, 1939, and to a greater extent in December, 1939, when money-market conditions became tight.

In the past, open-market transactions undertaken for the purpose of expanding or contracting the credit base were carried out through the discount market, which by tradition had become the link as well as the buffer between the Bank of England and the commercial banks. Under the new procedure, whenever a shortage of funds develops and the discount houses have difficulty in taking up the Treasury bills for which they have tendered the preceding week,

the official agents of the Bank of England in the discount market will buy for the Bank of England, and probably for the account of Public Departments, shortly maturing Treasury bills directly from the clearing banks, with the understanding that the latter will use the proceeds to buy from the market eligible bills of the longest maturity. Thus, the clearing banks have become the medium through which the Bank of England aids the discount market. The traditional barrier between the Bank of England and the commercial banks has been removed and is not likely to be reimposed.

When the clearing banks have a surplus of funds which cannot profitably be employed in the discount market by buying bills or making loans, the agent of the Bank of England will sell directly to them Treasury bills held by the Public Departments or the Banking Department. On the other hand, when the clearing banks need cash, they can obtain it not only by the traditional practice of calling loans from the market, but also by selling bills to the agent of the Bank of England.

This new procedure in open-market operations is an additional instrument of credit control and not a substitute for the old one. There has occurred, however, a significant change in the open-market operations in the discount market. In prewar days, when a shortage of funds developed in the market, the discount houses were forced "in the Bank," that is, they either had to rediscount eligible bills at the Bank of England at the punitive Bank rate or obtain seven-day loans at $\frac{1}{2}$ per cent over the Bank rate. Only purchases of bills initiated by the Bank of England could be made at the open-market rates. Since the outbreak of the war, however, when the discount market was pressed for funds it could invariably sell eligible and usually short-term bills to the agents of the Bank of England at the market rate. The discount houses are thus able to obtain assistance from the Bank of England, that is, be "in the Bank," without the penalty of discounting at the Bank rate. Should, however, the credit expansion and low interest rates policy of the war be superseded by a policy of credit contraction, the official discount rate would regain its significance.

Treasury Deposit Receipts. In July, 1940, the Government instituted a new method of short-term borrowing as an alternative to increasing the amount of Treasury bills. The amount of the weekly offerings of Treasury bills is kept at a fairly stable level, and the Exchequer short-term requirements in any one week are covered by accepting through the Bank of England six-month deposits

from the clearing and Scottish banks and also from Empire central banks operating in the sterling area. These deposits, made in units of £500,000, are termed "Treasury Deposits by Banks" or "Treasury Deposit Receipts." Each week the Treasury, in consultation with the Bank of England, determines the amount it requires from the banks and communicates it to the chairman of the Clearing Bankers' Committee, which apportions on Friday the total among the banks. The individual banks are permitted to choose the day of the week in which to make their payments and thus are able to hold down fluctuations in their cash position to a minimum. This method of direct borrowing by the Treasury from the banks is somewhat similar to the banks' deposit of surplus cash at interest with the Bank of England during World War I.

The Treasury Deposit Receipts earn interest at rates fixed from time to time. The rate was originally fixed at $1\frac{1}{8}$ per cent per annum and remained unchanged until October, 1945, when it was reduced to $\frac{5}{8}$ of 1%. The Deposit Receipts are nonnegotiable but can be used by the banks at par to pay for their own and customers' subscriptions to new Government issues, except Treasury bills. The lending banks may require repayment before maturity, subject to a rebate at the Bank rate, which has been 2 per cent since October 26, 1939.

Owing to their six-month maturity and their eligibility for rediscount at the Bank of England, the Treasury Deposit Receipts are included by the banks among their quick assets, after cash, short loans, and bills. At the end of June, 1945, Treasury Deposit Receipts held by the eleven London clearing banks amounted to £1,938,500,000, representing 65.9 per cent of the clearing banks' liquid assets as against 4.6 per cent accounted for by bills discounted. Total Treasury Deposit Receipts on the above date were £2,075,500,000. The rapid growth of Treasury Deposits caused a question to be raised in Parliament in November, 1940, as to whether a limit should be fixed. The Chancellor of the Exchequer replied that he could not consider stipulating such a limit.

The Treasury Deposits by Banks enable the Exchequer to obtain funds for six months at an interest rate only $\frac{3}{32}$ per cent higher than the rate it currently pays on three-month Treasury bills. The ease in recalling the Deposits before maturity gives them a degree of liquidity possessed by the Treasury bills. On the other hand, while a bank in a tight cash position can call loans from the market and cease buying Treasury bills, it is hardly in a position to refuse

to accept its allotment of the weekly quota of Treasury Deposit Receipts. The Treasury Deposit Receipt has established an additional direct contact, including rediscount facilities, between the clearing banks and the Bank of England.

The Exchange Equalisation Account. The Exchange Equalisation Account came into existence on June 24, 1932, for the purpose of ironing out fluctuations in the pound sterling. At the time it commenced operations, its assets totaled £175,000,000, consisting mainly of Treasury bills. Two additional appropriations by the House of Commons brought the total of the Account up to £575,000,000.

On August 25, 1939, when the outbreak of the war with Germany became imminent, the Account withdrew its support of the pound. The Currency Defence Act of September 1, 1939, abolished the statutory limit on the size of the Account and authorized it to hold foreign securities and to use its assets, including gold and foreign exchange, to finance war purchases abroad. The operations of the Exchange Equalisation Account are surrounded by great secrecy and hence little is known about its activities.

The joint-stock banks. In contrast to the United States, England has not enacted special legislation regulating the organization and management of banks. Banks are incorporated under the Companies (Consolidation) Act of 1908 (amended in 1929), or in exceptional cases (as that of the Bank of England) under a Royal Charter and an Act of Parliament.

Banking in England is highly concentrated, and the branch banking system is firmly established. After the end of the First World War, the number of joint-stock banks decreased steadily, but since 1928 has remained stationary. At the end of 1938 the 15 joint-stock banks of England and Wales (excluding the Bank of England) maintained 10,151 branches. Owing to the manpower shortage, and destruction of buildings by aerial warfare, the number of branches was reduced during the war. At the end of 1943 the 13 joint-stock banks of England and Wales operated 8,279 branches.

The bulk of the banking resources of Great Britain is concentrated in five banks, called the "Big Five," shown in the table on page 536.

Deposits. In contrast to many of the Continental European banks, the British joint-stock banks are typical deposit banks. Their deposits are of two types: (1) balances on "current account," subject to withdrawal on demand and similar to demand deposits in

THE "BIG FIVE" AS OF DECEMBER 31, 1943

<i>Institutions</i>	<i>Number of Branches</i>	<i>Paid-Up Capital and Reserves</i>	<i>Deposits</i>
Midland Bank, Ltd	1,792	£ 28,569,230	£ 859,692,181
Barclays Bank, Ltd	1,763	27,108,217	822,499,871
Lloyds Bank, Ltd.	1,472	25,810,252	727,903,279
National Provincial Bank, Ltd . .	1,102	18,958,832	521,342,279
Westminster Bank, Ltd	969	18,640,314	541,789,356
Total	7,098	£119,086,845	£3,473,226,966

the United States, and (2) balances on "deposit account," which cannot be withdrawn as a rule on less than seven days' notice. In London, except by a special arrangement, no interest is allowed on current accounts. Outside of London, on the other hand, current accounts sometimes receive a rate of interest as high as the rate allowed in London on "deposit" accounts. The clearing banks in the London district, which include all the large joint-stock banks, usually pay on "deposit" accounts a rate 2 per cent below the Bank of England's discount rate. However, when the Bank rate was reduced on June 30, 1932, from $2\frac{1}{2}$ to 2 per cent, the rate on "deposit accounts" remained unchanged at $\frac{1}{2}$ of one per cent. "Fixed deposits," that is, large sums left on deposit for definite periods of several months, command a higher interest rate and are subject to special agreements.

Division of assets. Although the operations of the joint-stock banks are not regulated by law, during the course of years they have developed certain well-defined rules concerning the employment of their deposits. The approximate percentage of the London clearing banks' assets to their deposit liabilities is shown below, in order of liquidity:

	<i>Interwar Period</i>	<i>June, 1945</i>
Cash on hand	6 per cent	10 per cent
Balance at Bank of England	5 per cent	
Balances with other banks and items in process of collection	3 per cent	4 per cent
Money at short notice and call	8 per cent	4 per cent
Treasury bills and bills of exchange	14 per cent	3 per cent
Treasury Deposit Receipts . . . . .	.....	40 per cent
Investments (mainly a mixture of long- and short-dated British Government securities)	16 per cent	23 per cent
Discounts, loans, and advances	43 per cent	16 per cent

Although not required to do so by law, as is the case in the United States, by custom and tradition the joint-stock banks adhere to the practice of maintaining a cash reserve¹ of from 10 to 11 per cent

¹ Including balance at Bank of England.

against their deposits. Using this reserve ratio as a working basis, the banks as a rule refrain from granting new credits whenever the ratio of cash falls below 10 per cent of their deposits. The self-imposed rule of maintaining a reserve in cash of 10 to 11 per cent of their deposits thus has the same effect as the legal reserve requirements of the member banks in the United States.

From the outbreak of the war up to June 30, 1945, deposits of the London clearing banks, which account for about 85 per cent of total bank deposits of the country, rose from £2,245,000,000 to £4,751,000,000, an increase of 111.6 per cent. The increase of deposits by £2,506,000,000 was largely caused by an increase of £529,000,000 in investments and the lending of £1,939,000,000 by the banks to the Treasury in the form of Treasury Deposit Receipts. On the other hand, there was a decrease in advances of £224,000,000. Thus, the increase in deposits represents, almost entirely, funds placed at the disposal of the Treasury.

BALANCE SHEET ITEMS OF THE ELEVEN LONDON CLEARING BANKS

(in millions of pounds sterling)

	<i>August, 1939</i>	<i>Per Cent of Total Deposits</i>	<i>June, 1945</i>	<i>Per Cent of Total Deposits</i>	<i>+ Increase — Decrease</i>
Total deposits	2,245	...	4,751	...	+2,506
Cash*	233	10.4	494	10.4	+ 261
Balances with other banks, checks, items in transit..	74	3.3	180	3.8	+ 106
Money at call and short no- tice	147	6.5	195	4.1	+ 48
Bills discounted†	279	12.4	135	2.8	— 144
Treasury Deposit Receipts.	...	...	1,939	40.8	+1,939
Investments‡	599	26.7	1,128	23.7	+ 529
Advances	985	43.9	761	16.0	— 224
Total earning assets	2,034	90.6	4,182	88.0	+2,148
Capital and published re- serves	139	6.2	144	3.0	+ 5
Ratio of quick assets to de- posits§	32.7%		61.9%		
Ratio of government secu- rities to earning assets¶ ..	43.2%		76.6%		
Ratio of advances to earning assets	48.4%		18.2%		
Ratio of capital and reserves to investments	23.2%		12.8%		
Ratio of capital and reserves to earning assets	6.8%		3.4%		

* Balances at the Bank of England plus currency in the tills.

† Practically all Treasury bills since the outbreak of the war.

‡ Essentially long- and middle-term Government securities.

§ Quick assets include cash, balances with and checks in course of collection on other banks in Great Britain and Ireland, money at call and short notice, bills discounted, and Treasury Deposit Receipts.

¶ Government securities = bills discounted, Treasury Deposit Receipts, and investments.

The unprecedented volume of deposits is not likely to shrink materially in post-war years, since no substantial sales of the banks' holdings of Government securities to the public nor appreciable redemption of the Government debt with budgetary surpluses may be expected. The contraction of bank credit after World War I was very small. Deposits of the English joint-stock banks, exclusive of the Bank of England, rose from £809,000,000 at the end of 1913 to a record amount of £1,974,900,000 at the end of 1921, and subsequently declined to the lowest post-war figure of £1,806,800,000 at the end of 1925. Thus, despite a four-year period of currency deflation and appreciation of the pound to parity, a 50 per cent fall of prices from their post-war peak, and curtailed industrial activity, deposits were reduced by only 8.5 per cent.

Liquidity. The expansion of deposits has been accompanied by a steady increase in liquidity. In addition to the primary liquidity ratio of 10-11 per cent of cash to total deposits, observed as rigorously as if it were stipulated by law, the banks were maintaining in the interwar period a secondary ratio of other liquid assets of about 20 per cent, making a total of cash and quick assets of about 30 per cent of their deposit liability. While the cash ratio has remained at the traditional level, the secondary ratio rose steadily above the minimum after the outbreak of the war. The ratio of quick assets to total deposits increased from 32.7 per cent in August, 1939, to 61.9 per cent in June, 1945.

The amount of cash available to the banks depends on the operations of the Bank of England, but the size of the secondary ratio, particularly in a period of credit expansion, is determined by the individual bank and the availability of suitable assets convertible into cash at a few days' notice. Under the gold standard, and to a lesser extent even under the operation of the Exchange Equalisation Account, the amount of bank cash determined the volume of bank credit. After the outbreak of the war the procedure was reversed; it was the needed volume of credit that determined the amount of cash to be supplied by the authorities.

While the maintenance of a high secondary liquidity ratio affects earnings adversely, it enables the banks to meet possible large-scale withdrawals of deposits and eliminates the risk of price decline inherent in long-term securities.

Advances. The outstanding change in the composition of the earning assets of the clearing banks during the war was the decline

of advances—the largest and most profitable asset in prewar times—both in absolute and relative figures. On June 30, 1941, for the first time in the history of the British banks, investments exceeded advances. In November, 1942, Treasury Deposit Receipts rose to second place among assets, forcing advances down to third place. From £985,000,000 in August, 1939, representing 48.4 per cent of total earning assets, advances declined to £761,000,000 in June, 1945, or 18.2 per cent of earning assets. This downward movement is merely an intensification of a trend long in evidence in Great Britain and the United States.

The decline in advances after the outbreak of the war, despite the rise in prices, production, and employment, was brought about largely through Statutory Rules and Orders and the policy of the Treasury, communicated to the banks in the form of "suggestions for guidance." The banks were requested:

. . . to view their loans and advances as an instrument in the vigorous and successful prosecution of the war, to be chary of extending accommodation, however well secured, which would support unnecessary production and consumption, and, on the other hand, to turn a lenient eye to demands for credit required for essential purposes. . . . Wherever a given programme is checked or halted by lack of credit, the machinery is there for making the banks aware of the need, and, if necessary, pointing the finger of duty to them.

The negative aspect (of Orders and the specific guidance) has been to arrest almost completely the grant of fresh personal and investment advances. . . . The positive aspect . . . has been to give rise to a very considerable increase in bank advances to Government contractors and subcontractors. In many cases the help given by the banks in such directions has involved the grant of loans that would have been deemed thoroughly unsound by customary banking standards. Small firms engaged on Government contracts have been granted loans rising to quite fantastic ratios to the firms' own resources.²

While a considerable amount was lent by the banks to firms engaged on war work, it was not sufficient to offset the reduction caused by the drastic contraction of loans to large users of bank credit, such as the building industry, installment-purchase finance firms, and underwriters of new issues. In addition, where the Government assumed control over an industry like shipbuilding, shipping, or the trade in wool, the banks, with rare exceptions, were no longer called upon to finance these operations. Other factors in the decline of advances were the sharp curtailment of luxury industries, concentration of industries, repayment of stock-exchange loans, repayment of loans with proceeds from the liquidation of inven-

² "The Economist," *Banking Supplement*, November 16, 1940, page 4.

tories, and increased deposits resulting from deficit financing with bank credit, which enabled business to meet its working capital requirements without borrowing from banks.

Private banks. Of the numerous private banks which once operated all over England, very few are still in existence; most of them have either been absorbed by the joint-stock banks or liquidated. Of the few still in existence, some can trace their origin to the seventeenth century, and their continued existence is due to the excellent record of their business conduct. At the end of 1938 there were three private banks, with total resources of £13,565,000. These banks not only supply funds to the money market and make loans and advances to industry and trade, but also frequently participate in the underwriting of domestic and foreign capital issues. The ratio of their discounts and advances to total liabilities is larger than that of the joint-stock banks, while the proportion of their investments to total liabilities is smaller.

Dominion and colonial banks. These institutions transact most of their business in the dominions and colonies, but maintain offices in London in order to facilitate the foreign trade and the international financial transactions of their respective countries. In addition to financing transactions arising out of foreign trade, they often act as issue houses and as financial and fiscal agents for the loans contracted by their respective countries in the London market.

Foreign banks. In contrast to the restrictions imposed upon the establishment of branches of foreign banks by the State of New York and other States of the United States, Great Britain has no special laws relating to foreign banks, and the latter may establish branches in England and conduct their business under the same conditions that apply to the British institutions. Like the dominion and colonial banks, the branches of foreign banks supply bills of exchange to the market, transact foreign exchange business, and place their surplus funds at the disposal of the money market. The branches of foreign banks are the principal dealers in foreign exchange of the countries which they represent.

Overseas banks. The British joint-stock banks have opened few branches abroad. Instead, they conduct their foreign business through correspondents, affiliated institutions abroad, and specially organized overseas banks. The latter usually maintain their head offices in London, although one of the most important, the Hongkong and Shanghai Banking Corporation, has its head office in Hongkong.

Investment houses. In addition to the above-described banking institutions, which concern themselves primarily with commercial banking and with the placing of funds in the market or in the creation of acceptances, there are a number of investment houses that are primarily engaged in the flotation of long-term loans, domestic and foreign. In contrast to the situation in the United States prior to 1930, the number of investment houses engaged in the underwriting of foreign securities is small, and the business is concentrated in the hands of a few internationally known institutions which have been important factors in the exportation of capital from Great Britain for many decades. Furthermore, their field of operation is more or less well divided, and one house does not often compete for the business that is considered the field of operation of another institution. Some of these investment houses also engage in the creation of acceptances and in the financing of short-term transactions, and, at times, place large funds at the disposal of the money market.

Accepting houses. The function of the accepting houses consists of accepting bills of exchange, and thus guaranteeing their payment on maturity. The signature of a London acceptance house makes possible the instant conversion of international bills into cash; and, since the bills are sold in the market, the burden of financing the underlying transactions is shifted from the buyer or seller to the discount market. The acceptance houses usually charge a commission varying from $\frac{1}{4}$ to $\frac{1}{2}$ of one per cent on a three-months' bill, the commission depending upon the credit standing of the drawer and nature of the risk involved. The drawer or originator of the bill as a rule places funds with the acceptance house in time to meet the bill. The acceptor, however, must be prepared to take up the bills regardless of whether or not the funds have been provided. Usually balances are maintained by the drawers with the acceptance houses and are made available by them to the money market.

The larger acceptance houses also receive deposits on current account, buy bills, participate in the underwriting of foreign loans of both governments and corporations, and act as fiscal agents for the latter. Some of the acceptance houses deal in bullion. Although the acceptance houses also appear as buyers of bills, their main function is to accept. Long years of business experience have given the accepting houses a valuable and almost exclusive knowledge of the credit standing of the drawers of bills and of the under-

lying transactions, and this knowledge has enabled them to carry out their extensive business with practically no loss. It is only in times of great crisis, such as the outbreak of war, or the introduction of "standstill" agreements, or other restrictions to the free movement of funds, that the acceptance houses suffer considerable losses. In such cases they usually rely on and receive the full assistance of the Bank of England.

The bill brokers. A characteristic feature of the London money market is the existence of a buffer between the joint-stock banks and the Bank of England in the form of intermediaries whose exclusive function is to discount or purchase bills offered in the market. These intermediaries are either individuals or firms specialized in this field, and their knowledge of the credit standing of the acceptors makes them a valuable integral part of money market machinery. The bill brokers are the connecting link between the various members of the money market, and their mode of operation gives the market a great degree of liquidity.

There are three classes of bill brokers. (1) "running brokers," (2) private firms, and (3) public and private discount companies, called "discount houses." There were eight running brokers who acted as intermediaries between buyer and seller but never acted as principals in the transactions. The running broker works on a commission basis and consequently needs very little capital of his own. His specialized knowledge of the sources of supply and demand for bills of certain names and maturities and of the commitments of the individual acceptance houses makes him a useful member of the money market. His opinion about the trend of money rates is sought by all interested parties, and his advice is usually accepted in fixing the rate when a substantial supply of bills is disposed of. The banks wishing to buy bills often avail themselves of the services of the running broker, who, for the sake of his reputation, will pass only on bills that he considers a first-class risk.

There were 17 private firms, with an aggregate capital of about £8,000,000, that bought and sold bills for their own accounts. Almost their entire capital is invested in securities that are pledged as collateral for loans obtained from banks and other lenders of short-term funds. They transact their business with borrowed funds, and thus appear in the market in the dual capacity of dealers in bills and borrowers of short-term funds.

There were three big public and four private discount companies. The three public companies are Alexander's Discount Company,

Ltd., National Discount Company, Ltd., and Union Discount Company of London, Ltd., with combined capital and reserves of £9,-326,667, bills discounted in the amount of £186,866,801, and total assets, £256,852,014 (as of December 31, 1943). The four private companies had a capital of £1,625,000 at the end of 1938. In contrast to the clearing banks, which never sell bills or borrow money, the discount houses sell bills in case of need or when there is a chance of making a profit, and borrow in the open market for a day or a week. The public companies also accept deposits at call or notice from the public (preferably from leading traders and merchants), on which they generally allow interest at $\frac{1}{4}$ to $\frac{1}{2}$ of one per cent above the rates paid on deposits by the joint-stock banks.

Since the funds employed in the discount market represent the bulk of the surplus short-term funds, the discount market was the most sensitive market and reflected immediately any change in demand and supply. If a contraction of credit took place, this market was the first to feel it. A safety valve, however, was provided in the readiness of the Bank of England to discount bills at the Bank rate, which is usually 1 per cent above the lending rate of the clearing banks, or to make advances for not less than a week at a rate which is practically always $\frac{1}{2}$ of one per cent over the Bank rate. The 1 per cent difference between the Bank rate and the standard lending rate of the clearing banks to the bill market constitutes theoretically the extreme range of the rate for bills. This narrow margin makes the bill broker the most alert student of financial conditions at home and abroad, because a misinterpretation of conditions or a lack of knowledge of certain facts influencing the trend of money rates may turn his profit into a loss.

The discount market during the war. The war adversely affected the London discount market in all its important functions. The international commercial bill of exchange on London, which accounted for the bulk of the discount business, had been gradually losing its importance since 1931 and disappeared with the outbreak of the war. The specialized knowledge of names and trades throughout the world and the skill in grading and discounting commercial bills acquired by tradition and long experience ceased to have any practical value. The attempt in the immediate prewar years to develop the domestic acceptance met with some degree of success, but the return was only a small fraction of the earnings of which the market had been deprived with the disappearance of the international sterling acceptance. The concentration of trade after

the declaration of war in the newly created Ministries of Supply, Food Supply, and Shipping, and in Government-controlled agencies, virtually brought to an end the use of the domestic bill. The discount market has thus lost its original and most important function, which gave it the distinction of being a vital element in Britain's commercial and financial organization.

In the 1930's the Treasury bill began to replace the commercial bill, contributing a steadily growing proportion of the discount business, and now accounts for probably 95 per cent of all bills passing through the market. The routine transactions in Treasury bills do not require the skill or the services of the greater part of the existing personnel of the market. Furthermore, the rapid growth of the Government short-term debt has not appreciably increased the business of the discount market. By tradition the banks do not tender directly for Treasury bills, and in the prewar organization of the London money market there was no direct contact between the clearing banks and the Bank of England. Hence, a substantial increase in the weekly tender issue of Treasury bills would have brought the discount market additional automatic profits on the resale of the bills to the banks, which, apparently, in the opinion of the authorities, the market did not deserve. Consequently, in the last quarter of 1939, tradition was ignored and direct transactions in Treasury bills between the clearing banks and the Bank of England were instituted, thus by-passing entirely the discount market for a considerable part of the banks' dealings in Treasury bills. From the fall of 1939 to July, 1940, when the Treasury Deposit Receipt was introduced, the official agent of the Bank of England was selling to the banks Treasury bills originally issued through the tap. As a result of these developments, the discount market has been considerably weakened in its function as an indispensable link between the commercial banks and the Bank of England.

Concentration in the discount market. During the past decade, and particularly since the outbreak of the war, the Bank of England on occasion has requested the discount market to reduce the number of discount houses by consolidations, with the object of raising the capital and reserves of each firm to at least £1,000,000. This amount is considered by the authorities a desirable minimum capitalization. Some firms were approached directly by the Bank of England with the suggestion that they merge and form stronger units. As a result of this prompting, backed by the Treasury since

the beginning of the war, the number of discount houses was contracted through mergers and consolidations from twenty-two in 1930 to twelve in July, 1942.

The reason for the official drive for concentration was the shrinkage in the volume of bills of exchange after the outbreak of the war. Hence, the return on the discount business, including the standardized transactions in Treasury bills, provides only a small part of the overhead expense. The discount houses, therefore, have for years past relied mainly on bond holdings and transactions for their income. These operations involve a greater degree of risk than the acceptance business and consequently require a stronger capital structure.

International acceptance business. In contrast to 1914 the impact of the outbreak of World War II upon the London money market was of short duration and caused little disturbance, because the volume of foreign sterling acceptances outstanding at the end of August, 1939, was only a small fraction of what it was in August, 1914.

Immediately after the declaration of a state of war with Germany the Treasury directed the Bank of England to extend aid to approved acceptors of bills of exchange who were unable to meet their liabilities because the war deprived them of the remittances due from their obligors abroad. Provided the bills were normally discountable in the London market and were accepted before September 3, 1939, the acceptance houses could obtain from the Bank of England special advances of funds necessary to meet the bills at maturity. Such advances were at a punitive rate of 2 per cent over the Bank rate, with a minimum of 6 per cent per annum.

The problem of assisting the market arose mainly in connection with the German standstill credits, which were estimated to amount to about £37,000,000 at the end of August, 1939. As a result of suggestions and requests of the Bank of England, approximately 60 per cent of the German standstill acceptances had been taken up by the accepting banks for their own account well before the outbreak of the war. The greater part of the outstanding debt was in strong hands and its withdrawal from the market and its writing off and removal from the balance sheet caused no difficulty. In some cases, however, resort had to be made to special advances from the Bank of England, causing a considerable expense at a time when the earning capacity of the merchant banks was reduced by

the virtual suspension of new issues, by the loss of the bulk of the foreign-exchange business to the clearing banks, and by the disappearance of the security and bullion arbitrage business

The merchant banks. The war dealt the merchant banks a particularly heavy blow because it deprived them of most of their normal functions. By the slow process of evolution and the gradual adaptation to changing conditions, the London merchant banks on the eve of the war were engaged in the following activities: granting acceptance credits; receiving deposits from customers for whom they accepted; foreign-exchange transactions, including those resulting from the international acceptance business, which in turn afforded opportunities for arbitrage in foreign exchange, securities, and bullion; floating and servicing bond issues, mainly of foreign borrowers; and managing investment portfolios of individuals and corporations.

At the outbreak of the war the merchant banks held about £23,000,000 of German standstill bills, and more acceptance credits became frozen as the German armies occupied country after country on the Continent of Europe. The domestic acceptance business, laboriously developed in the years immediately before the war, declined greatly with the disappearance of free commodity markets and the introduction of direct Treasury financing of Government-controlled commodities. Thus, for example, the movement of wheat, tea, and cotton from wholesalers through the middlemen and processors to retailers and consumers was financed by Government Ministries. Similarly, the importation of wool from Australia was entirely financed by the Treasury instead of by acceptance credits or bank loans.

The war reduced drastically the volume of international trade and consequently diminished considerably the volume of foreign-exchange business. The gold bullion market had no business to transact because the newly mined gold was bought directly by the Bank of England for the account of the Treasury. The flotation of foreign long-term loans came to an end in 1931, and the war brought a ban on foreign lending and arbitrage.

Questions for Study and Review

- 1 What are the principal provisions of the Peel Act?
2. What are the principal provisions of the Currency and Bank Notes Act of 1914?
- 3 In what kinds of transactions may the Bank of England engage?

- 4 Is the currency of the Bank of England flexible? Why?
- 5 What is the meaning of the "proportion"?
- 6 How do the joint-stock banks replenish their cash reserves?
- 7 How do the joint-stock banks invest their assets?
- 8 What significant changes occurred in the balance sheet of the joint-stock banks during World War II?
- 9 What important change was made during the war in the open-market operations of the Bank of England?
- 10 What are Treasury Deposit Receipts?
11. What is the function of the accepting houses?
- 12 What is the function of the running broker?

Problems

- 1 From the statement of the Bank of England given on page 527, calculate (a) the "reserve"; (b) the "proportion"; (c) the ratio of gold to notes in circulation and deposits
- 2 On December 31, 1943, the combined statement of the 13 English joint-stock banks showed:

Paid-up capital.	£ 79,028,133
Reserve funds	61,570,610
Deposit and current accounts	4,010,496,694
Cash in hand and at Bank of England	617,648,112
Money at call and short notice	142,589,582
Discounts, advances, loans	2,183,042,212
British Government securities	1,101,350,430
Bonds, stocks, and other investments	71,502,652
Total assets.....	4,260,362,160

- (a) What is the reserve ratio? (b). What is the ratio of capital funds to total deposits? (c) What percentage of deposits has been invested in Government bonds? (d) What percentage of deposits has been invested in loans? (e) What is the ratio of Government bonds to total investments?

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CHAPTER 30

The Banking Systems of France and the Netherlands

The German military occupation of France and the Netherlands had a pronounced effect on the banks of the two countries. In each country the German authorities appointed banking commissioners who dominated the activities of the banks and co-ordinated them to meet the military, economic, and political requirements of the Reich. The Germans also established new banking institutions and acquired full ownership or control of existing banks. During the period of occupation 1940-1944/45 few facts were made available concerning bank operations. After their liberation both countries were confronted with difficult economic, political, and social problems, and the future of the banking systems is as yet not known. In France there is a strong movement to nationalize the financial institutions, and the Netherlands Government has expressed the intent to nationalize the Netherlands Bank.

The following is a description of the banking systems of the two countries as they operated before the war.

The Bank of France. The Bank of France plays a predominant rôle in the French financial system, and its influence on credit conditions there is perhaps greater than that of the Bank of England or the Federal Reserve banks in their respective countries. The dominance of the Bank of France is due chiefly to the fact that it not only performs the ordinary functions of a central bank but, in addition, is the largest commercial bank in France. It is not exclusively a bankers' bank, as are the Federal Reserve banks in the United States, nor does it deal chiefly with banks, as does the Bank of England. On the contrary, a great part of the business of the Bank of France is done directly with individuals and business con-

cerns. In order to carry on its general banking business, the French central bank operates a nation-wide system of 660 branch offices and agencies. Anyone properly introduced and identified may open an account with the Bank of France and submit bills for discount. While not required by law to carry reserves with the Bank of France, the commercial banks customarily maintain substantial balances on deposit and make full use of the central bank's facilities for discounting and collecting commercial paper.

Organization and administration. The Bank of France was established in 1800, and during the course of the succeeding years its statutes have been frequently changed, but like most European central banks it has remained a privately owned institution operating under the close supervision of the Government. Its capital stock, now amounting to 182,500,000 francs, is privately held and is actively traded on the bourse.

By a law enacted July 24, 1936, and made operative August 17, 1936, the statutes of the Bank of France were materially altered. Under this law all stockholders of French nationality are entitled to attend the annual general meeting of stockholders, at which each shareholder has the right of one vote regardless of the number of shares he holds. The management of the Bank is vested in a General Council composed of the governor and two deputy governors, twenty councilors, and three censors. The governor and the deputy governors are appointed by the Government, and are not required to own shares of the Bank. Of the twenty councilors two are elected at the general meeting of stockholders from among themselves; one is elected by secret ballot by the personnel of the bank; and three represent the Ministers of Finance, National Economy, and the Colonies. One is appointed by the Committee of Savings Banks from among its members and one by the National Economic Council from among its vice-presidents; six are chosen by the Minister of Finance from lists of three names submitted by the National Federation of Consumers' Coöperatives, the General Confederation of French Artisans, the Assembly of Presidents of Chambers of Commerce of France, the General Confederation of Labor, the Permanent Assembly of Presidents of Chambers of Agriculture, and the Professional Commercial Sections of the National Economic Council; and six shall be *ex officio* members: the President of the Finance Section of the Council of State; the Manager of the Mouvement Général des Fonds; the General Manager of the Caisse des Dépôts et Consignations; the Governor of the Crédit

Foncier; the General Manager of the Crédit National; the General Manager of the Caisse Nationale du Crédit Agricole. The three censors are elected for three years at the general meeting from among the stockholders; they act as auditors of the bank and attend the meetings of the General Council in a consultative capacity only. The councilors other than the six *ex officio* members are elected or appointed for three years. No member of Parliament may be a member of the General Council. The General Council may delegate all or part of its powers to a permanent committee comprised of the governor, the deputy governors, and four councilors, including one appointed by the Minister of Finance from among the *ex officio* members and three appointed by the General Council.

Discounts and advances. As a result of the extensive use of the domestic bill of exchange, or trade acceptance, in French commerce, the discounting of this type of commercial paper is one of the principal activities of the Bank of France. The Bank's statutes and regulations governing discounts are comparatively simple. The essential requirements are that bills be drawn to order, have a fixed maturity of not more than three months, and bear the signatures of three persons or firms known to be solvent. No distinction is made between trade acceptances and bankers' acceptances. Paper bearing only two signatures may be discounted provided it is collateralized by stock of the Bank of France or by any other securities on which the Bank is authorized to make advances.

Like other European central banks, the Bank of France makes credit available by advances on securities, or Lombard loans, in addition to discounting bills. The interest rate on Lombard loans is usually $1\frac{1}{2}$ to 2 per cent higher than the discount rate, and the rate on advances on gold is normally $\frac{1}{2}$ to 1 per cent higher.

Open market operations. In contrast to its broad power to discount bills, the Bank of France, up to the middle of 1938, had very limited authority to engage in open market operations. Its statutes permit three types of open market operations—namely, (a) dealings in bonds of the Caisse d'Amortissement, (b) the purchase of bills and short-term securities for the account of foreign central banks, and (c) dealings in foreign exchange.

In accordance with the convention of June 23, 1928, there was issued to the Bank of France 5,930,000,000 francs of bonds of the Caisse Autonome d'Amortissement (an autonomous bureau for the amortization of the public debt) in settlement of certain advances

made by the Bank to the Government during World War I. In December, 1931, an additional 2,342,000,000 francs of Caisse d'Amortissement bonds were delivered to the Bank to cover losses on its holding of sterling bills consequent upon the abandonment of the gold standard by Great Britain. The convention of June 23, 1928, authorized the Bank of France to sell these bonds in the open market "if it seems expedient, in order to influence the volume of credit" and likewise to repurchase them. This privilege opened the way for the Bank of France to develop a new instrument of credit control. However, none of the bonds has ever been sold, and the Bank has never attempted to develop open market operations in securities. Regular amortization had gradually reduced the amount of these bonds to 5,396,000,000 francs by the middle of 1940.

Although the Bank of France had no authority to deal in the open market in bills and securities for its own account, other than in bonds of the Caisse d'Amortissement, it was permitted to engage in such operations for the account of foreign central banks. The convention of June 23, 1928, between the Government and the Bank, provides that "the Bank of France shall have authority to purchase bills and short-term securities for the account of such foreign central banks as shall have opened current accounts on its books." The Bank may guarantee such bills and securities and may also rediscount them at the request of foreign central banks. Such open market operations, if conducted on a sufficiently large scale, would have an appreciable effect on credit conditions in France. However, they are of little significance as a means of credit control, since the initiative must come from foreign central banks rather than from the Bank of France. Ordinarily they serve merely to facilitate the maintenance of working balances in Paris by foreign central banks, but in times of financial crisis they would permit foreign institutions to assist the Bank of France by placing additional funds at the disposal of the money market.

By a decree of June 17, 1938, the sphere of the Bank's open market activity was greatly enlarged. The Bank was authorized to buy and sell negotiable short-term bills and credit instruments such as: bank acceptances, Treasury bills, national defense notes, promissory notes, and short-term paper issued by public bodies. Under no conditions, however, may purchases of negotiable instruments be made for the benefit of the Treasury or of the public bodies issuing these instruments.

Another effective method of influencing credit conditions by open market operations available to the Bank of France is through dealings in foreign exchange. The Bank has full authority to buy and sell foreign bills of exchange and employ balances abroad. The purchase or sale of foreign bills in France has the same effect on the money market as dealing in securities. The purchase of foreign bills from French owners places funds at the disposal of the money market, while the sale of bills withdraws funds. However, such operations not only affect the money market but also affect exchange rates. Active bidding by the Bank of France for, let us say, sterling bills would tend to raise the exchange rate on London and might possibly lead to gold exports. Conversely, the sale of sterling bills in large volume would depress the sterling rate and might cause a movement of gold from London to Paris. Since the establishment of the Exchange Stabilization Fund on September 26, 1936, a considerable portion of the foreign exchange transactions previously carried out by the Bank of France have been executed by the Fund. As in the case of England, the Fund is administered by the central Bank.

Prior to the decree of June, 1938, the Bank of France had to rely chiefly on manipulation of the discount rate, on its discount policy, and on moral suasion to influence credit conditions. However, owing to the structure of the French financial system, these instruments proved effective. The discount rate is not only the rate at which the commercial banks borrow from the Bank, but also the rate at which the money market and, to some extent, business in general borrow. Any change in the rate is directly and immediately effective.

Note issue. The principal function of the Bank of France which distinguishes it as a central bank in spite of its extensive commercial banking activities is the issuance of bank notes. Prior to June 25, 1928, the amount of notes which the Bank might issue was limited by law, and the amount was frequently changed. However, the amount and nature of the reserves to be held against notes in circulation were not defined by law, but left entirely to the management of the Bank. Bank of France notes were legal tender, and the Bank was required to redeem them on demand in gold or silver five-franc pieces at its option.

The monetary law of June 25, 1928, fixed the gold content of the franc at 65.5 milligrams of gold 0.900 fine, giving it a par value of

\$0.0392 in terms of the dollar of that date. However, the law provides that "the present definition is not applicable to international payments which, prior to promulgation of the present law, have been validly stipulated in gold francs." In other words, the new value of the franc applied only to internal debts and not to existing international gold obligations. The latter provision was designed to protect French investments in foreign bonds, most of which provided for payment in gold francs.

The new law placed France on a gold bullion standard. The Bank of France is now required to redeem its notes in gold on demand, but only at its central office and only in "such minimum amounts as shall be fixed by agreement between the Minister of Finance and the Bank of France." This minimum was fixed at 215,000 francs up to September 26, 1936, when it was raised to 5,000,000,000 francs. The former system of a fixed maximum note issue was abandoned, and the Bank is now required to maintain gold reserves equivalent to not less than 35 per cent of the amount of notes in circulation plus other demand liabilities.

By law of October 1, 1936, the provisions of the monetary law of June 25, 1928, fixing the gold content of the franc and requiring the Bank of France to buy and sell gold on demand at fixed prices were suspended. The Council of Ministers was authorized to fix later by decree the gold content of the franc at not less than 43 nor more than 49 milligrams 0.900 fine—that is, between about 65.6 and 74.8 per cent of the previous parity. At the same time, the gold held by the Bank of France was revalued at the upper limit. This yielded a profit of about 17 billion francs, of which 10 billion francs were allocated for the establishment of an Exchange Stabilization Fund, and the balance was applied toward reduction of the Government debt to the Bank.

A decree of June 30, 1937, provided that the gold content of the franc shall be fixed ultimately by a decree of the Council of Ministers, which was simultaneously empowered to decree provisions regarding the convertibility of Bank of France notes into gold.

By a decree of July 21, 1937, the gold reserves of the Bank were revalued at the lower limit of 43 milligrams of gold, 0.900 fine, as provided in the decree of October, 1936. Another revaluation of the gold of the Bank took place in November, 1938, when the gold content of the franc was reduced to 27.5 milligrams, 0.900 fine, and again to 23.34 milligrams, 0.900 fine, in February, 1940.

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A decree of September 2, 1939, released the Bank of France from the obligation to maintain a 35 per cent gold coverage against notes in circulation and other demand liabilities

The huge amounts exacted by Germany from defeated France as costs of the armies of occupation compelled the Vichy Régime to borrow large sums from the Bank of France, thus causing a tremendous increase in the volume of currency in circulation. The effects of the war and the occupation on the Bank of France can be seen from a comparison of its statements as of August 31, 1939, and July 13, 1944

BALANCE SHEET ITEMS OF THE BANK OF FRANCE

(In millions of francs)

	August 31, 1939	July 13, 1944*
<i>Assets:</i>		
Gold	97,266	84,598
Foreign Exchange	218	37
Domestic bills		
Open market	9,396	45,851
Special	1,708	..
Other	15,009	4,856
Advances to Government.		
For occupation costs	..	400,200
Other	20,577	70,850
Other assets....	22,233	23,799
<i>Liabilities:</i>		
Notes in circulation	142,359	584,820
Deposits		
Government.	3,304	729
Other.	18,038	48,752
Other liabilities	2,708	4,890

* Last available statement prior to liberation.

After the liberation, the French government took measures to reduce the inflated volume of currency in circulation (which is reported to have reached 642 billion francs at the end of September, 1944) with the result that by the end of May, 1945, it amounted to 548.9 billion francs.

The commercial banks. The French commercial banking system has gradually developed over a long period with comparatively little Government regulation or supervision, and there is a variety of different types of banking institutions serving the financial needs of the country. The French banks may be roughly classified into four main groups: (1) the credit banks—*banques de dépôts*; (2) investment banks—*banques d'affaires*; (3) local and regional banks; and (4) private banks, or *hautes banques*. In addition,

there are a number of foreign banks with offices in France, as well as savings banks and agricultural credit and coöperative banks.

Credit banks. The number of credit banks in France is comparatively large, but the following six are the most important: (1) *Crédit Lyonnais*, (2) *Comptoir National d'Escompte de Paris*, (3) *Société Générale*, (4) *Crédit Commercial de France*, (5) *Crédit Industriel et Commercial*, and (6) *Banque Nationale pour le Commerce et l'Industrie*.

In order to be in a position to accumulate deposits and finance local business enterprises, the credit banks have established an extensive system of branches and agencies covering the entire country. The larger institutions—namely, the *Société Générale* and the *Crédit Lyonnais*—have more than a thousand such offices. However, one of the big credit banks, the *Crédit Industriel et Commercial*, has adopted a system similar to what is known in the United States as chain banking. Instead of establishing a large number of branch offices, it has acquired interests in a number of small local banks. The essential difference between the method of operation of the *Crédit Industriel et Commercial* and that of the other large credit banks is that the former utilizes local capital and is more closely allied with local business interests.

The following table shows the number of branches and sub-branches of the six large credit banks at intervals during recent years.

BRANCHES AND SUB-BRANCHES OF THE LARGE CREDIT BANKS

<i>End of:</i>		<i>End of:</i>	
1925.. .. .	1,803	1933.....	2,127
1929.... ..	2,069	1934	2,111
1930.....	2,166	1935.	2,100
1931.....	2,202	1936.....	2,060
1932.. .. .	2,161	1937.....	2,070

In addition to branches and agencies at home, the large French credit banks have also opened a number of branches in the colonies and protectorates, as well as in foreign countries. Furthermore, some of the larger banking institutions have also established branches and affiliates in foreign countries.

The large French credit banks resemble the joint-stock banks of England in that the ratio of capital resources to deposits is comparatively low. This is primarily the result of the depreciation of the currency, which caused a more rapid increase in deposit liabilities than in capital funds. At the end of 1930 the ratio of capital

to deposits for the four large French credit banks was 8.0 per cent, as compared with 19.6 per cent at the end of 1913. Contraction of deposits during the business depression resulted in an increase in the ratio to 9.4 per cent at the end of 1933, which was higher than the ratio of 6.3 per cent for the "Big Five" British banks on the same date.

Discounts and advances. The chief function of the French credit banks is to provide short-term financial accommodation to business. Contrary to the general practice in the United States, this credit is extended principally by discounting trade bills or trade acceptances. The usual method of trade financing in France is for the seller of merchandise to draw a draft on the buyer, thereby giving rise to a trade bill which, when accepted, becomes two-name paper. The maturity of trade bills varies from 30 days to three months or more. In case the seller desires to obtain cash, the trade bill can be discounted with a bank. Such paper is considered one of the safest and most liquid forms of investment and, provided it meets the eligibility requirements, can be discounted with the Bank of France.

Bills discounted ordinarily represent about one half of the total assets of the large credit banks. However, this item includes National Defense (Treasury) bonds, which the banks hold as liquid reserves.

The credit banks also provide financial accommodation to their customers by advances on current account. These are unsecured loans which take the form of overdrafts on the customer's account. Such loans usually represent about 20 to 25 per cent of the total resources of the larger banks. Contrary to the situation in the United States, the French banks employ a comparatively small proportion of their funds in secured loans. Secured loans consist partly of "report loans" on stock exchange collateral made to finance trading in securities, but chiefly of advances secured by warehouse receipts or other documents evidencing title to commodities. Loans and advances, other than on current account, constitute only about 3 to 4 per cent of the aggregate resources of the credit banks.

Deposits. The credit banks accept three chief types of deposits—namely, deposits on current account which are subject to check, sight deposits payable on demand, and time or fixed deposits which are made for a stipulated period or are payable only after due notice in advance. Deposits on current account constitute 50 to 60 per

cent of the total deposits of the large credit banks, sight deposits average around 40 per cent, while time and fixed deposits are comparatively small.

The rate of interest paid by the various French banks on deposits maturing within less than 30 days is fixed by the syndicate of banks, which, while similar to the American Bankers Association, has greater powers over its members. This organization includes not only the commercial banks but also the *banques d'affaires* and the private banking institutions. Members of the bankers' syndicate are divided into three groups: (1) prime banks, which pay the lowest rate of interest; (2) middle-class banks, which pay a slightly higher rate; and (3) third-class banks, which pay the highest rate. Banks that endeavor to increase their deposits find it desirable to be put in a lower class in order to be able to pay higher rates of interest.

The French commercial banks do not take participations in business enterprises, but merely act as distributors of their securities. Furthermore, the credit banks do not make loans for long periods to corporations. However, in order to provide French industry with longer-term credits, particularly in times when the market is not favorable for the flotation of new securities, the French credit banks have founded a number of subsidiaries. Hence they can shift longer-term credits to their subsidiaries and thus preserve their own liquidity. The purpose of these subsidiaries is to provide medium-term credit to the various French industries and to carry them until their securities can be sold to the public. Another purpose is to grant longer-term credits for the financing of foreign trade.

Banques d'affaires. The investment banks, also known as *crédit mobilier banques* or *sociétés financières*, are engaged chiefly in providing long-term capital for business enterprises, and their ordinary commercial banking business has traditionally been conducted only as a sideline. Their principal functions are promoting and financing new enterprises, providing new capital for existing companies, and arranging business combinations. The services of the *banques d'affaires* usually consist of organizing syndicates for the underwriting and distributing of new issues of securities, but, in case circumstances do not warrant a public issue, they sometimes arrange syndicates to take up and hold securities pending distribution to investors. At times they make temporary advances to business concerns to be funded by the subsequent sale of securities. The

very nature of their business limits the *banques d'affaires* to a comparatively few important clients, with which they have a close relationship and often a direct financial interest. Frequently, the managers or directors of the investment banks are appointed as directors of client companies, but it is usually considered preferable to exercise control and supervision by more indirect means.

To a large extent, the *banques d'affaires* operate with their own capital and with the funds of capitalists who keep large deposits with them. In recent years their capital and reserves have amounted to from one fifth to one third of their total deposits. In contrast to the credit banks, about one third of the investment banks' deposits are time deposits. Consequently these banks do not maintain so high a degree of liquidity as the credit banks. Direct participations and investments in securities of private enterprises are usually about equivalent to the amount of the banks' own capital. In addition, they hold substantial amounts of Government securities as well as commercial loans and discounts.

The various *banques d'affaires* have not developed a system of branches at home but have established a number of branches and subsidiaries in foreign countries through which they do their foreign business. After the stabilization of the currency and with the decrease in the volume of domestic issues, the *banques d'affaires* began more and more to engage in commercial banking business. Not having branches through which to accumulate the necessary funds, these institutions have entered into close relationship with a large number of smaller banks located in the provinces. The latter prefer to deal with the *banques d'affaires* because, not having branches in the provinces, they do not compete with the local banks. On the other hand, the *banques d'affaires* offer the local banks all the facilities of their main offices in Paris. At present, the *banques d'affaires*, therefore, represent a mixture of investment and commercial banking.

The private banks. The private banks consist of some six or seven large and influential firms located in Paris and known as *les hautes banques*, as well as a much larger number of private banking houses in both Paris and the chief provincial cities. The *hautes banques* are, for the most part, old, established family concerns with a long record of conservative banking practice. Their activities are quite varied. Some of them engage principally in managing family fortunes and the estates of wealthy clients. Others have played an important rôle in the distribution of securities, and have

substantial interests in industrial enterprises and representatives on their boards of directors. The larger Paris institutions are dealers in trade bills, acceptances, and foreign exchange; they also make loans to selected clients, accept deposits, and create acceptances. Although the large private banks still have great prestige, they are today relatively less important in the French financial system than before the First World War.

The Netherlands banking system. As was stated in the introduction to this chapter, the war and the German occupation affected very materially the Netherlands economy as well as the banks. The public debt, the volume of currency in circulation, and bank deposits rose very sharply. Between April 29, 1940, and the end of German occupation of the country in May, 1945, notes in circulation increased from florins 1,166,000,000 to florins 5,518,000,000. Some of the private banks were liquidated, while others were taken over by German interests. The close economic and financial ties with the Netherlands East Indies were completely severed. These developments are bound to cause considerable changes in the Netherlands banking system.

The Dutch were among the pioneers in the development of modern banking in Europe. The *Amsterdamsche Wisselbank*, established by a decree of January 31, 1609, was one of the most famous of the early European banks. The business of this bank, like that of the early English goldsmiths, was to receive deposits of bullion and coin for safekeeping.

Bank concentration. Up to the beginning of the present century most of the Dutch banks (the Netherlands Trading Society being a notable exception) were comparatively small and of merely local importance. However, shortly before the First World War a concentration movement similar to that which took place at earlier dates in England and Germany made itself felt in Dutch banking, with the result that at the present time by far the largest portion of the country's banking business has become centralized in the hands of a few leading institutions. This concentration has partly consisted in the absorption of the smaller, provincial institutions by the larger banks and partly in the maintenance of informal alliances between banks which continue their separate existence but which are actually under the same control.

The Netherlands Bank. The Netherlands Bank (*De Nederlandsche Bank*) was organized at Amsterdam by a royal decree of March 25, 1814. The Bank is a private institution incorporated as

a limited company with a paid-up capital of fl. 20,000,000. Only Dutch citizens may be voting shareholders. No person may, either for himself or for others, or for himself and others collectively, return more than six votes. The management of the Netherlands Bank is vested in a managing board composed of a president and a secretary—appointed by the Crown for a period of seven years out of a list containing two names for each appointment, submitted by a combined meeting of the managing board and the commissioners—and of not less than two directors, elected by the shareholders for a term of five years. The managing board is assisted by an advisory committee of five members, elected by the shareholders for five years, and by a board of not less than fifteen commissioners, also elected by the shareholders. The supervision of the Bank on behalf of the government is exercised by a royal commissioner appointed by the Crown.

The operations of the Netherlands Bank may be conveniently considered under two general headings: (1) note-issue function and (2) banking functions.

Note-issue function. From December 15, 1806, to September 26, 1847, Holland was on the bimetallic standard, but on the latter date she adopted the single silver standard, to which she adhered up to May 21, 1873, when a decline in the price of silver resulted in the suspension of free coinage of silver. During the following two years the Dutch currency was not linked to any metal, but on June 6, 1875, a new monetary unit (the gold florin) was introduced, with a metallic content of 604.8 milligrams of fine gold, equivalent to about \$0.4020 of United States currency (old parity). Free coinage of gold was provided, the gold florin (or guilder) was made full legal tender, and the larger silver coins (half-florin, florin, and 2½ florins, called rijksdaalder) remained legal tender, as they had been under the regime of the silver standard. The free coinage of silver, however, continued to be prohibited.

The original bank law contained no stipulations regarding the note cover, the regulation of the latter having been delegated to the Crown. A royal decree of April 16, 1864, renewed on June 20, 1880, ordered the Bank to maintain a metallic reserve of at least 40 per cent against notes, demand deposits, and bank assignments. There are no provisions regarding the cover of the remaining 60 per cent, and the Bank consequently has a free hand in its choice of assets. The Netherlands Bank was one of the first, if not the first, of the central banks obligated by law to maintain a metallic reserve

against demand deposits. The assignments mentioned above are drafts of the Bank on its branches payable at sight, or not more than three days after sight, or not later than eight days after date. The law of July 18, 1904, made the notes of the Bank legal tender to any amount, and the government ceased issuing paper money.

The metallic reserve of the Bank may consist not only of gold but of silver coin and bullion. In fact, up to 1906 more than half of the total reserve usually consisted of silver. Foreign exchange holdings and balances with foreign correspondents may not be considered as part of the metallic reserve.

A peculiar feature of the Dutch currency system is that the central bank is required to redeem its notes only in other legal-tender currency. Since other legal-tender currency consists of both gold and silver coin, the Bank may at its option effect redemption in silver. Thus Holland is not and never has been legally on the gold standard, but rather, like France before the war, on the so-called "limping" standard. In practice, however, the Netherlands Bank, although not legally obligated to do so, has maintained the Dutch currency on what amounts to a gold standard. The Act of September 30, 1936, which established an Exchange Equalization Fund, suspended for an indefinite period the Bank's obligation to redeem its notes.

When Great Britain abandoned the gold standard, the Netherlands Bank had sterling balances to the extent of £10,760,795. Of this amount £2,496,795 was sold at an average rate of fl. 9.55 per pound (the gold parity is fl. 12.10½ for one pound); and £7,839,000 (with the option of increasing this amount by the remaining £425,000 which was on deposit with the Bank for International Settlements) was sold for future delivery to the Dutch East Indian Government at the rate of the day of delivery, with a minimum of fl. 9.25 and a maximum of fl. 9.45 per pound sterling. The Dutch East Indian Government used these sterling balances for the redemption of its two sterling loans on their first calling dates—July 15, 1933, and August 15, 1933, respectively. This arrangement was amended by an Act of March 15, 1933, whereby the Netherlands Bank delivered to the government of the Netherlands Indies the total amount of £8,264,000 at the rate of fl. 9.25. Thus the loss incurred by the Netherlands Bank on the sterling balances amounted to fl. 29,889,408.15, or slightly below one and one-half times the capital of the bank. An Act of May 27, 1932, authorized the Netherlands Bank to charge to the Government the sterling

exchange loss sustained by the Bank during the financial year ended March 31, 1932, to the extent that such loss was not made good by reducing the reserve fund and the special reserves of the Bank to a total of fl. 8,000,000. By applying fl. 4,255,558.41, representing the net profits of the current year, and fl. 6,302,654.57 taken from the reserve fund and the special reserves, the loss was reduced to fl. 19,-331,195.17, which amount was charged to the Netherlands Government on a special non-interest bearing loan. By May 15, 1939, this loan had been reduced to fl. 7,629,955.16.

On March 31, 1940, the gold stock of the Bank was revalued in accordance with the Act of March 16, 1940, at the rate of 2,009 guilders per kilogram fine gold as against 1,647.50 guilders, at which rate the gold had been valued since the abandonment of the gold standard in September, 1936. This revaluation resulted in an increase in the book value of the Bank's gold holdings of 221,794,-467.69 guilders, which "profit" accrued to the government. Out of this profit 7,629,955.16 florins were used by the government to liquidate the balance of the sterling exchange loss account.

The gold holdings of the Bank were further revalued on July 3, 1943, when the price of gold was increased to fl. 2,098 per kilogram, and again on July 2, 1945, when the price of gold was increased to fl. 2,970 per kilogram. In connection with the last revaluation a "profit" of fl. 209,277,097 was set up on the books of the Bank as a special reserve.

Between the termination of the German occupation of the country in May, 1945, and August 27, 1945, notes in circulation were reduced by more than one half to fl. 2,573,488,730. This was accomplished by the withdrawal of 100-guilder notes from circulation for which the owners received a blocked credit with the Bank and by the deposit of hoarded currency with the banks, which in turn used it to buy Treasury obligations. The Treasury used the currency to redeem its obligations discounted with the Netherlands Bank.

Banking functions. The Netherlands Bank, besides carrying on its functions as the sole bank of issue, conducts a general banking business. It is required by law to maintain a branch office at Rotterdam, at least one agency in each province, and correspondents in certain other places. At the end of March, 1940, the Bank had one branch office, 17 agencies, and 75 correspondents.

The operations in which the Bank may engage are clearly defined in the Bank Act of February 2, 1937, and in the statutes.

The government, however, may authorize the Bank to undertake in the public interest transactions not mentioned in the Bank Act. The Bank is authorized to discount bills, notes, and debentures; to make advances (Lombard loans); to purchase and sell precious metals, bills, checks, telegraphic transfers, and other commercial paper payable abroad; to receive deposits on current account; to provide transfer, clearing, and collection facilities for its customers; to receive securities and other valuables for safekeeping; and to sell "assignments" (drafts) on its offices and correspondents. It also acts as fiscal agent and banker for the government and certain government institutions, such as the Post Office Savings Bank. The Act stipulates that the Bank "shall not grant unsecured credits or advances to any party whatsoever." The Bank is authorized to buy and sell in the open market domestic bankers' acceptances and Treasury bills and notes, provided the latter were held by third parties prior to their sale to the Bank. The investments of the Bank are limited by law to the amount of its capital and reserve funds. There are no restrictions as to the parties with whom the Bank may deal, and an important part of its business is transacted with private firms and individuals.

By the terms of the Bank Act the Netherlands Bank is authorized to discount:

- (1) Bills and promissory notes bearing the signatures of two or more parties who are jointly and severally liable for the entire amount, and maturing within a period in accordance with the customs of trade;
- (2) Debentures redeemable within six months from the time of discounting, provided that the party presenting such paper for discount shall be jointly liable for its redemption.

Advances. Normally, about 30 per cent of the operating capital of the Netherlands Bank is employed in advances, or collateral loans, as compared with about 20 per cent invested in domestic bills. These advances are of three principal types: ordinary advances, advances in current account, and advances to the government.

Ordinary advances are made on securities, goods, warrants, coin and bullion, and paper eligible for discount, usually for a period of one month. If, two days before maturity, neither party has given notice, the advances are automatically renewed for the same period. The larger part of the advances are usually renewed. However, borrowers occasionally requiring money for short periods find it convenient to maintain at the Netherlands Bank deposits of col-

lateral against which they may obtain advances in current account in the form of overdrafts. While short Lombard loans run for a minimum of eight days, overdrafts in current account may be repaid every day. The Bank Act requires the Netherlands Bank to make advances in current account to the State Treasury against the security of Treasury notes. Such advances must not exceed fl. 15,-000,000, and they bear no interest, except when the government issues currency notes (the "silver bonds" of August, 1914, were not considered notes in the sense of this clause) and when the metallic surplus—namely, the amount of specie and bullion in excess of the 40 per cent legal minimum—falls below 10,000,000 guilders. The Act of September 30, 1936, authorized the Bank to advance to the State amounts up to fl. 300,000,000 against Treasury bills issued for account of the Exchange Equalization Fund.

The rates charged by the Netherlands Bank for credit extended by it have been comparatively low and stable for many years. Even in the fall of 1929, when the great demand for credit for security speculation in New York raised interest rates throughout the world to abnormally high levels, the Netherlands Bank was able to maintain its discount rate at $5\frac{1}{2}$ per cent, while the discount rate of the Bank of England was forced up to $6\frac{1}{2}$ per cent and that of the Federal Reserve bank of New York, to 6 per cent.

The rate quoted for the discount of domestic bills is generally termed the discount rate, but a separate rate is quoted for the discount of promissory notes. This is normally $\frac{1}{2}$ of one per cent above the rate on bills. The Lombard rate (on loans secured by stock exchange collateral) is usually somewhat higher than the rate on promissory notes. On March 25, 1929, the Bank discontinued the practice of quoting on foreign securities a separate Lombard rate, usually $\frac{1}{2}$ of one per cent higher than that on domestic securities. The differentiating rate instituted in December, 1865, to curb the then growing speculation in foreign securities was no longer required, since the Netherlands Bank admits only a very small portion of the foreign securities traded in on the Amsterdam Stock Exchange as collateral for loans. During periods of financial stringency the rate for advances on current account is often as much as one per cent above the rate for ordinary advances, but when money is easy the rates are usually the same.

Other banking institutions: general banks. The bulk of the banking business of the Netherlands is done by several large institutions, which by reason of the broad scope of their activities have

come to be known as general banks. Of these general banks, those having a capital and surplus of over fl. 50,000,000 are: the Nederlandsche Handel-Maatschappij, the Amsterdamsche Bank, the Rotterdamsche Bank-vereeniging, and the Twentsche Bank. Although somewhat smaller, the Incasso-Bank also belongs to this group.

The Amsterdamsche Bank was organized in 1871 by German, Austrian, and Dutch banks to act as a connecting link between the German and Dutch money markets. This bank participated in 1924 with the Twentsche Bank and with Swedish, German, and British banks in the organization of the International Bank at Amsterdam, an institution for financing international transactions. The bank operates about 70 branches throughout the country.

The Rotterdamsche Bank-vereeniging was founded in 1863 as the Rotterdamsche Bank, with the object of financing private enterprises in the East Indies. The latter were being organized at that time in connection with the government's withdrawal from plantation enterprises and with the gradual transfer of this business to private initiative. In 1872 the bank withdrew from the East Indies, where it suffered heavy losses, and directed its activities mainly to the financing of trade and industry. In 1911 it merged with the Deposito en Administratie Bank of Rotterdam, and in 1929 it absorbed its affiliate, the Nationale Bank-vereeniging. The paid-up capital of the bank grew from the original 5 million florins to 30 million in 1913 and 75 million in 1919. However, as a result of the postwar deflation the capital was decreased in 1924 to 50 million, and the surplus was reduced from 37 million to 20 million florins. On January 1, 1939, the capital and surplus amounted to 62 million florins. The bank maintains about 150 offices, which are scattered throughout the country.

The Twentsche Bank was established at the end of 1916 to take over the affairs of the Twentsche Bank-vereeniging, B. W. Blijdenstein & Co., established in 1861 mainly to finance exports to Java. The house of B. W. Blijdenstein & Co., established in 1858 in London, operates at the present time as a branch of the Twentsche Bank, but for certain reasons continues under its own name. The Twentsche Bank has always paid particular attention to the development of industry in Holland. It maintains about 70 branches throughout the Netherlands.

The Incasso-Bank was established in 1891 to carry on, mainly, a regular commercial banking business. Its initial capital of fl. 104,-

000 was increased during the first ten years to fl. 5,000,000 and reached fl. 30,000,000 in 1928. The bank engaged even before the First World War in the security business, which was further developed during and after the war. The bank maintains about 40 branches throughout the Netherlands.

Ratio of capital to deposits. A peculiarity of the Dutch banks is the small amount of their deposits in relation to capital and surplus. This peculiarity may be seen from the following facts.

In 1929 the ratio of capital and surplus to liabilities (excluding acceptances and sundry accounts) for the principal commercial Dutch banks was 28 per cent, compared with that of 7.4 per cent for the principal British banks and 9.5 per cent for the chief French institutions. The capitalization of the Dutch banks is large in relation not only to the deposits but also to the financial needs of the country. This fact explains the endeavor of the banks to employ a part of their resources in international business.

The paucity of bank deposits in Holland is attributable to a number of peculiarities in Dutch financial practice. In the first place, it has long been the custom in Holland for business concerns as well as individuals to place their liquid resources in prolonged loans on the stock exchange rather than in banks. Again, the Dutch have shown a traditional propensity for placing their savings in securities rather than in bank deposits, so that the wealth of the people is administered not by the banks, as is the case in the United States, but generally by the people themselves. Another factor is the lack of a well developed checking system at the banks, owing to the competition of the postal check and transfer service, which has practically monopolized the business of transferring funds. In addition, the postal savings system has gained great popularity, attracting funds which in other countries would have been deposited with the banks. The fact that some municipalities, and Amsterdam in particular, have established transfer and deposit systems of their own, and that the international character of Dutch business has forced many concerns to maintain deposits in foreign countries, has also adversely affected domestic deposits.

Absence of legal restrictions. In the Netherlands, as in several other European countries, there is no general banking law. Banking institutions other than the central bank have much the same legal status as any other business enterprise. They are not subject to any governmental supervision and are under no legal obligation to publish periodical balance sheets. Dutch banks on the whole

operate more or less along the lines of the Continental European system; that is, they are engaged in commercial as well as investment banking. However, the banks in Holland are not so closely tied up with industry as those elsewhere on the Continent, and they do not exercise the same influence on the policies of corporations as do the banks in Germany, Austria, Hungary, and Belgium. In addition to their commercial and investment banking business, the banks also perform the functions of stock exchange houses, executing orders for their customers.

Provincial banks. There are several provincial banks which are local in character and are consequently of little importance to the Amsterdam money market.

Colonial banks. The colonial banks have played an important rôle in the Amsterdam money market and have greatly contributed to its international position. The importance of these institutions lies in the fact that they are large borrowers at the time of the financing of crops and, after the marketing of the latter, appear as large lenders of short-term funds. The colonial banks may be divided into two groups: (1) note-issue institutions, which comprise the Javasche Bank and Surinaamsche Bank, and (2) the other colonial banks, which have no note-issue privilege.

Cultuurbanks. Similar to the colonial banks, but more restricted as to operations, are the cultuurbanks. They engage primarily in financing the development of plantations and the marketing of crops. They operate with their own capital, which is relatively large, and have also obtained long-term funds through the issue of bonds. They manage not only their own plantations but also, for compensation, administer those belonging to others. Strictly speaking, the cultuurbanks can be classified not as banking institutions but rather as financial management organizations. Their importance to the Amsterdam money market arises from the fact that, after the harvesting of the crops, they place large amounts of funds in the Amsterdam market. In recent years a considerable portion of their liquid funds has been placed in acceptances.

Amsterdam cashiers. An institution peculiar to the Amsterdam money market is that of the "cashiers" (Kassiers). The cashiers have existed in Holland for several centuries; the cashier business has been mentioned in government decrees as far back as 1604. Originally the functions of the cashiers were similar to those of the early London goldsmiths. They accepted for safekeeping the cash of the merchants and held it at their disposal. They

charged a commission for this service, since they were prohibited from investing or lending the entrusted funds. The commercial law code of 1838 gives the following definition: "Cashiers are persons to whom for consideration of the specified compensation or commission, money is being entrusted for safe-keeping and repayment."

At present there are only two cashier institutions in Holland, the *Associatie-Cassa* and the *Kasvereeniging N. V.*, both located in Amsterdam. The *Associatie-Cassa*, established in 1806, remained a cashier within the legal definition of the word. It pays no interest on deposits which are being kept in cash. It uses its own funds for granting short-term secured loans. In 1864 the *Associatie-Cassa* organized an affiliate institution, the *Rente-Cassa*, which is permitted to pay interest on deposits. It invests these deposits in bills, *prolongatie* loans, and (not more than 25 per cent) in securities.

The *Kasvereeniging* was organized in 1865 out of a private cashier firm, with the purpose of performing functions similar to those of the London joint-stock banks. It accepts deposits in current account and on time, paying interest on the latter only. It discounts bills and makes advances on merchandise and securities. In 1929 the *Kasvereeniging* absorbed the third cashier institution, the *Ontvang-en Betaalkas*, founded in 1813 and reorganized into a corporation in 1874. Neither of the two cashier institutions maintains branch offices.

Unlike the commercial banks and banking firms, the cashiers do not undertake the flotation of security issues, and by their statutes they are not allowed to grant credits without security. They act as collecting agencies for the other banks and for the Amsterdam stock exchange brokers. The latter, in addition to cash balances, maintain with the cashiers large blocks of securities on which they can obtain short-term loans. This has been the outgrowth of the fact that the cashiers held a large volume of the deposits of the important merchants and banking institutions of the country and became clearing centers for them.

The cashier institutions in recent years have played an increasingly important rôle in the Amsterdam money market, and now hold a position more or less comparable to that held by the discount houses in the London market. The banks not infrequently maintain accounts with both cashiers. The cashiers in turn have ac-

counts with the Nederlandsche Bank, and checks drawn on the *cashiers* (*Kassiersbriefjes*) are accepted by the central bank as cash; this is not the case with regard to checks drawn on the other banks.

Private bankers. In addition to the incorporated banks, private bankers still are influential in the banking structure of Holland. This position is due to the fact that the average Hollander still considers the small banker as his financial adviser and prefers to do business with him rather than with an employee of a large bank. The most important private banking firms are Hope & Co., established in 1732; R. Mees & Zoonen, established in 1720; Lippmann, Rosenthal Co., established in 1859; and Pierson & Co., established in 1875. These institutions are prominent in the Amsterdam money market, particularly as issuing houses.

In addition there are a number of miscellaneous institutions created chiefly for the purpose of financing international trade.

Miscellaneous institutions. Like every other important international money market, Amsterdam has a number of special financial institutions engaged in international transactions. To this group belong the following classes of institutions: (1) the international acceptance corporations; (2) the Wool Bank; (3) foreign banks; and (4) Dutch overseas banks, established with the aid of domestic and foreign capital.

International acceptance corporations. The most important of the international acceptance corporations are the Netherlands Acceptance Company, the International Bank at Amsterdam, and the International Credit Company. These institutions, all of which were established in 1924, are chiefly engaged in the creation and discounting of acceptances arising out of international trade.

Wool Bank. The Wool Bank was established in October, 1924, as successor of the *Wolfinanciering Maatschappij*. Its chief purpose is to finance imports of wool into Amsterdam from which center the wool is distributed throughout a large part of the Continent. Owing to the activities of the Wool Bank, an increasing amount of bills covering wool shipments has been stated in florins. This fact has greatly aided the development of florin bills. In 1926, two years after its organization, the bank accepted over 59,000,000 florins in florin acceptances and also a number of pound sterling bills.

Foreign banks. Of the foreign banks, some, such as the *Banque de Paris et des Pays-Bas*, had already been established before the

First World War, but most of them were established during the war and postwar periods. Of these the German banks have a preponderant position. Following the end of the war, and particularly after the stabilization of the reichsmark in 1923, almost every important German bank organized an affiliate in Holland, acquired an interest in an existing bank, or participated in the establishment of new banks in Amsterdam. The affiliates were to assume the rôle played before the war by the London branches of German banks. This development was of a magnitude to cause anxiety on the part of the Dutch authorities. However, the financial crisis of May-September, 1931, not only brought that movement to a stop but also initiated the liquidation of some German affiliates and interests in Amsterdam banks.

Dutch overseas banks. The great importance of foreign trade in Holland and the fact that the Dutch have been a trading nation for many centuries have led to the development of overseas financial institutions: (1) The Hollandsche Bank voor Zuid-Amerika (Netherlands Bank for South America) was established in 1914. It maintains branches in Argentina and Brazil. In 1933 the bank absorbed the Hollandsche Bank voor de Middellandsche Zee (Netherlands Bank for the Mediterranean Sea), which was organized in 1919 by the above institution together with the Rotterdamsche Bank-vereeniging and certain non-banking firms. (2) The Nederlandsche Bank voor Zuid-Afrika (Netherlands Bank for South Africa), founded in 1888, has its head office in Amsterdam and maintains about 20 branches throughout South Africa.

Questions for Study and Review

- 1 What assets are eligible for discount at the Bank of France?
- 2 What open-market operations may the Bank of France undertake?
3. State the types of credits granted by the "credit banks."
4. What is the function of the *banques d'affaires*?
- 5 Explain the organization and chief functions of the Netherlands Bank.
- 6 Outline the conditions under which bank notes are issued in the Netherlands
- 7 What are the functions of the Amsterdam cashiers; the cultuurbanks?

Problems

- 1 The statement of the Bank of France for the week ended November 26, 1942, showed the following items:

Gold	Frs. 84,597,593,843
Subsidiary coin	322,057,779
Sight balances abroad ..	36,840,662
Loans on securities	2,858,306,120
Bills discounted	6,721,698,558
Negotiable securities purchased in France	9,320,600,000
Negotiable bonds of the <i>Caisse Autonome d'Amor-</i> <i>tissement</i>	5,241,273,764
Negotiable Treasury bonds	30,000,000,000
Non-interest bearing advances to the Government.	
Payment of cost of German occupation forces	198,868,301,122
Other advances	78,700,000,000
Total assets	423,943,116,293
Notes in circulation	364,768,064,780
Sight liabilities	55,627,958,083

(a) Calculate reserve ratio. (b) Calculate earning assets. (c) Which items can the Bank use in open-market operations?

2. The statement of the Netherlands Bank as of August 13, 1945, was as follows:

Assets:

Domestic bills, promissory notes, etc	Fl. 18,350,000
Foreign bills and deposits abroad ..	4,488,448,444
Loans and advances	141,381,216
Advances to the Government .. . . .	...
Gold coin and bullion	712,789,754
Silver coin and subsidiary coin	147,112
Investment of capital, reserves, and pension fund	82,361,109
Bank premises and sundry accounts	32,230,025
Total	Fl. 5,475,707,960

Liabilities:

Capital	Fl. 20,000,000
Reserve	13,871,297
Special reserve	74,414,834
Special reserve (gold revaluation profit July 2, 1945) ...	209,277,097
Pension fund	14,725,007
Currency in circulation	2,858,030,065
Bank assignments	90,873
Balances in current account*	2,136,943,546
Sundry accounts	148,346,241
Total	Fl. 5,475,707,960

* Includes Fl. 1,256,670,938.01 blocked in connection with the withdrawal from circulation of 100-guilder bank notes and of Treasury paper currency.

(a) What is the reserve ratio? (b) List the earning assets. (c) Which assets does the Bank use in open-market operations? (d) The item "balances in current account" is subdivided into deposits of the Government, florins 302,-816,268, and others florins 1,834,127,278. Who are "others"? (e) Explain the relatively small amount of deposits (florins 1,256,670,930 are blocked and hence actual deposits are only fl. 880,272,608).

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CHAPTER 31

The Banking System of Germany

German banking before the First World War. Berlin became an important money center shortly after the Franco-Prussian War. The Reichsbank was established in 1875, and about ten years later Berlin assumed an influential position as an international money market. One of the distinguishing characteristics of the Berlin and of the Continental European banks in general was the extent of their active participation in the development of industrial establishments, which carried on their operations, to a large degree, with the aid and under the direction of the banks. The German banks were more closely connected with industry than the British, French, or American credit banks, but they were less involved in industrial enterprises than those of Austria and Hungary.

In spite of the rapid accumulation of wealth in Germany, the German banks operated to a considerable extent with the aid of foreign short-term credits. These funds were attracted to Germany by the higher rates that usually prevailed there. Thus, during the pre-war period, Germany was a lender of long-term capital and a borrower of short-term funds. The concentration of banking resources and the growth of certain individual banks were also characteristic of the pre-war period. In 1872 there were about 130 deposit banks in Germany, but by 1914 most of the liquid capital and credit resources of the country was in the hands of about a dozen banks. Four of these (the so-called "D banks")—the Deutsche Bank, the Disconto-Gesellschaft, the Dresdner Bank, and the Darmstaedter Bank (Bank fuer Handel und Industrie)—greatly surpassed all the others both in resources and in volume of business.

War period and inflation. While the First World War had a disastrous effect on German banking, the treaty of peace and the period of inflation which followed were even more disastrous. Under the Treaty of Versailles, the greater part of Germany's overseas investments was expropriated, and thus substantial losses were sustained by the German banks. The depreciation of the currency reduced considerably the value of a large part of their liquid assets, and the only way open to the German banks to salvage the remaining portion of their own funds was through the purchase of real estate or through the exportation of capital.

In November, 1923, the German mark was *de facto* stabilized. It was only after that event that the great impoverishment caused by the war and by currency inflation became apparent. At the end of September, 1923, the total volume of Reichsbank notes in circulation amounted to 1,520,511,000,000,000,000 marks, the gold value of which was only \$361,900,000, as compared with a total circulation including gold of about 6,000,000,000 marks, or \$1,430,000,000 before the war. Whereas the per capita currency circulation in terms of gold amounted to about \$21 before the war, it amounted to only about \$6 in 1923.

The effect of the war and the currency depreciation on the German banks may be seen from the table on page 575.

The capital and surplus of these institutions was reduced to about 28 per cent, and liabilities to creditors (mainly time and demand deposits) to 21 per cent, of the respective amounts at the end of 1913, while the acceptance business had almost completely disappeared. Although these figures do not represent exactly the actual situation of the various institutions because of the conservative way in which the first gold balance sheets were drawn up, they nevertheless indicate the great shrinkage in resources caused by the war and its aftermath.

In the fall of 1924 the Dawes Plan was adopted and the currency was legally stabilized. The restoration of confidence in Germany, together with the high rates of interest prevailing in the German money market, brought an inflow of large amounts of foreign short-term funds. From that time up to the middle of 1931 the Berlin money market was almost entirely under the influence of the movement of foreign short-term funds. The dependence of the German banks on foreign capital is evidenced by the fact that at the end of 1930 about 30 per cent of the total deposits of the six large Berlin banks originated abroad.

SOME BALANCE SHEET ITEMS OF PRIVATE INCORPORATED BANKS*

(In millions of reichsmarks)

	Dec. 31, 1913	Jan 1, 1924
Assets:		
Checks and bills	3,743 2	227.9
Due from banks and bankers	965 1	784.3
Securities	1,320 8	275 0
Loans in current accounts	10,209 3	1,360.5
Long-term loans	12,237.5	145.2
Total assets	31,176.3	4,044 6
Index	100.0	13 0
Liabilities		
Capital	4,158 3	1,131.8
Surplus	986 3	286 0
Creditors		
Deposits of German banks	620 3	163 2
(Other creditors)	10,088 6	2,045.0
		2,208 2
Acceptances	2,708.9	8 0
Number of banks included	399	500

* *Statistisches Jahrbuch fuer das Deutsche Reich*, 1929, pp 316-319.

The German banking system. A classification of German banks according to their functions is impossible, because of the variety of activities which they carried on. A more feasible classification is that of public and private institutions. The former are classified as such either because they were government-owned or because their operations were more or less of a public character, and because they were very closely regulated and supervised by law. In many instances the government of the Reich or the governments of political subdivisions were represented in the management of the banks and exercised a considerable influence on their policy. The private banks consisted of the incorporated credit banks and the private bankers. After the banking crisis of 1931, however, most of the incorporated private credit banks came under the control of the government through direct or indirect stock purchases. By the end of 1937 the Reich had sold to the public practically all of its private bank stock holdings. A detailed classification of the German banks on this basis follows:

- I. Public credit institutions:
 1. Reichsbank
 2. Gold Discount Bank
 3. Other banks of issue
 4. State banks
 5. Reichs-Kredit-Gesellschaft
 6. Provincial and communal banks

7. Savings banks
8. Central clearing institutions
9. Public mortgage banks
- II Private credit or commercial banks.
 1. Incorporated credit banks
 2. Private banks

The German Reichsbank. The Reichsbank was the heart of the German banking and credit system. It was the central bank of the country, the custodian of the gold reserve, and the ultimate source of credit. The serious lack of capital in Germany, combined with the country's dependence on foreign short-term credits, greatly enhanced the importance of the Reichsbank. Not only was it called upon for a greater amount of credit than before the First World War, but it also played a much more important rôle in the foreign exchange market than it ever did before the war.

The statutes of the Reichsbank were amended from time to time, but the most drastic change was made in 1924, when the bank was completely reorganized in accordance with stipulations contained in the Dawes Plan. The statutes were further modified when the Young Plan was placed in operation in 1930 and, again, in October, 1933, and February, 1937. The new Reichsbank Law of June 15, 1939, repealed the Banking Law of August 30, 1924, and the amendments thereto.

Under the last-mentioned law, the German Reichsbank was a public institution of a peculiar legal status. It was under the control of the Reich and directly responsible to the Fuehrer (Leader) and Chancellor, although its capital stock was owned by private stockholders. Reichsbank shares could be owned only by German citizens and corporations. The Reichsbank had the sole note-issue privilege, and was entrusted with the duty of safeguarding the German currency, providing clearing facilities, and directing the utilization of the available means of payment of the German economy in the public interest and in conformity with the economic system.

Loans and open market operations. The legal provisions with regard to loans and open market transactions permitted the Reichsbank to do the following:

1. To buy and sell bills and checks with three signatures of parties of known solvency. The requirement of the third signature could be dispensed with when the paper was secured by collateral or in some other manner. The bills had to be good commercial bills and mature within three months from the date of purchase;

2. To buy and sell Reich Treasury bills maturing within three months from date of purchase;
3. To buy and sell for the purpose of regulating the money market fixed interest-bearing securities admitted to official trading on the stock exchanges, and Treasury bills due within one year from the date of purchase;
4. To buy and sell gold and foreign exchange;
5. To make Lombard loans for periods not exceeding three months on collateral of
 - (a) gold up to the amount of the official purchase price;
 - (b) bills meeting the requirements of 1 above at not more than nine-tenths of their nominal value;
 - (c) Reich Treasury bills meeting the requirements of 2 above at a maximum of nine-tenths of their nominal value;
 - (d) fixed interest-bearing securities designated by the Managing Board of the Reichsbank, Treasury bills of the Reich and its provinces maturing within one year from the date of the loan, and claims against the Reich Treasury at a maximum of three-fourths of their market value;
 - (e) merchandise stored in Germany or documents representing it up to two-thirds of its value.
6. To grant working credits to the German Postal Service and the German Railways up to a combined amount of Rm. 200,000,000 for both organizations;
7. To grant working credits to the Reich.

In contrast to the previous provisions which limited advances of the Reichsbank to the Reich working fund to Rm. 100,000,000 and the aggregate amount of 90-day Treasury bills discounted or accepted as collateral to Rm. 400,000,000, the Law of June 15, 1939, empowered the Fuehrer to determine the maximum amount of such loans.

Note issue. The Bank Law of 1924 required that Reichsbank notes in circulation be secured by a minimum of 40 per cent in gold and foreign exchange. Since the amount of foreign exchange held as cover against notes in circulation was not to exceed 25 per cent of the total cover, each note was to be covered by at least 30 per cent in gold. Foreign exchange eligible as cover for notes consisted of bank notes of foreign banks of issue, foreign bills of exchange arising out of commercial transactions having a maturity of not more than fourteen days, and sight drafts drawn on banks of known standing in important financial centers. The balance of security above the legal reserve against notes in circulation consisted of discounted domestic and foreign bills of exchange with a maturity not exceeding three months. Under the Bank Act of 1924, whenever the cover fell below the legal minimum, the Reichsbank was required to pay to the government a graduated tax on the note issue

in excess of the amount against which the reserve equaled 40 per cent, and at the same time had to raise the discount rate by at least one-third of the percentage of the tax payable, using as a basis a minimum discount rate of at least 5 per cent, which had to be maintained whenever the reserve dropped below 40 per cent.

The provision for the graduated currency tax and the 5 per cent minimum discount rate in periods of deficient reserves was abrogated by the amendments of October 27, 1933. These amendments also altered the reserve provisions of section 28 of the Bank Law, which made securities acquired by the Reichsbank or held as collateral against daily maturing loans eligible for cover against bank notes in circulation. While the principle of maintaining a 40 per cent metallic reserve against notes in circulation was retained in the law, the amendments provided that a concurrent resolution of the central committee of the stockholders and of the directors of the Reichsbank could empower the latter to let the metallic reserve fall below the legal minimum.

In conformity with the National-Socialist economic concept that "the stability of the German currency rests not on the available quantity of gold and foreign exchange, but on the fact that the amount of currency issued by the central bank is kept in proper relationship to the turnover of consumption and production goods produced by German labor," the Law of June 15, 1939, changed the note cover provisions. Notes in circulation had to be covered primarily by eligible bills of exchange, checks, Reich Treasury bills, and securities purchased by the Reichsbank, and by daily maturing Lombard loans. Gold and foreign exchange had to be kept in amounts deemed necessary to settle balances abroad and to maintain the value of the currency.

Deposits. Banks, non-banking concerns, and individuals throughout the country maintained balances with the Reichsbank and its 478 offices and numerous sub-branches primarily for clearing purposes. The amount of deposits which banks or others dealing with the Reichsbank maintained was not, as in the United States, fixed by law. To have a "giro," or clearing account, with the Reichsbank, depositors other than banks had to maintain a minimum balance of 100 reichsmarks. On the other hand, banks which were members of an Abrechnungsstelle (clearing office) located in cities where the Reichsbank maintained central offices, had to carry a minimum balance of 1,500 reichsmarks. The number of clearing accounts at the end of 1938 was 46,985, as compared with 26,148 at

the end of 1913. Owing to the shortage of working capital in Germany, the minimum balances kept by banks with the Reichsbank fell to a point lower than before the First World War and amounted to about 2 to 3 per cent of their total deposits. The Bank Act stipulated that the Reichsbank could not pay interest on giro accounts.

Discount policy. To enforce control over the money market, the Reichsbank used three measures: (1) the discount rate; (2) the rationing of credit; and (3) direct action, by forcing the leading banks to follow the course of action desired by the Reichsbank. All three of these measures were used at times, although credit rationing and direct action were resorted to only in extreme cases. The use of the discount rate by the Reichsbank did not differ from that in other countries and needs no further discussion.

The German money market from 1924 up to the middle of 1931 was closely connected with the international money markets, and the discount policy of the Reichsbank depended to a very large extent upon financial conditions prevailing in foreign centers. So long as foreign markets had confidence in Berlin, an advance in interest rates in that market led to an inflow of funds, and the Reichsbank was more a follower than a leader in the Berlin money market. It was only when the foreign international money markets lost confidence in Germany, and not only refused to make new loans but even withdrew part of those already extended, that credit rationing was put into effect. It was exercised by the Reichsbank from April, 1924, to the end of 1925, for a short time in the spring of 1929, and in a milder form in July, 1931. In each case the policy of credit rationing coincided with the loss of confidence in the German currency both by foreigners and by German nationals.

The need for credit rationing rose out of the fact that domestic banks and corporations, in order to obtain foreign exchange, discounted a part of their portfolios with the Reichsbank and purchased foreign exchange with the proceeds thereof. Through credit rationing the Reichsbank granted to each individual borrower only a fixed amount of credit, and for the rest of the funds the borrowers, notably banks, had to seek accommodation elsewhere. Banks and business concerns in need of funds were thereby forced to sell foreign exchange to the Reichsbank. Through this measure the Reichsbank not only prevented the use of its funds for the purpose of buying foreign exchange but also compelled banks and corporations to sell to it a part of their foreign exchange holdings.

Effect of credit rationing. Credit rationing has a grave effect on the national economy as well as on the money market and the banks. Such a central bank policy contradicts the well established principle that credit must always be obtainable at a price. It deprives the central bank of its function of being the ultimate source of credit through which the banks can increase their liquidity. Credit rationing is a very radical measure and the most drastic step that a central bank may undertake under any circumstances. The Reichsbank therefore always refrained from adopting this policy whenever it could be avoided.

Policy of direct action. A new element in the credit policy of the Reichsbank was introduced in May, 1927, when the president of the Reichsbank forced the large Berlin banks to reduce their loans on securities (report and Lombard loans) used for stock exchange operations. This was done to curtail stock exchange speculation financed chiefly with foreign short-term funds and to prevent a rise in prices, which would cause reduced exports, increased imports, and pressure on the foreign exchange holdings of the Reichsbank.

The only means of stopping the flow of funds feeding a stock exchange boom was direct pressure, brought by the central bank on the commercial banks. This method was resorted to by Dr. Schacht, when he announced to the members of the Berlin Stempel-Vereinigung that the decisive factor in granting rediscount facilities to each individual bank in the future would be the latter's liquidity as determined by an examination of the bank. This was a novel procedure, for the Reichsbank usually looked merely at the quality of the paper offered for discount and not at the status and liquidity of the borrowing banks. The latter, therefore, if they wished to obtain additional credits from the Reichsbank, had to increase their liquidity and were thus forced to curtail their secured loans, whether or not they agreed with the Reichsbank.

Other public credit institutions. In addition to the Reichsbank there were in Germany several so-called public credit institutions which were the outgrowth of the paternalism of the German Federal and State governments. Some of these banks were established prior to the First World War, while others were created after the close of the war for the purpose of aiding in the reconstruction of the German economy.

Gold Discount Bank. The Gold Discount Bank was established on March 19, 1924, before the reorganization of the Reichsbank, for

the purpose of providing Germany with foreign short-term credits. It was intended to serve as a central institution for foreign transactions, thus supplementing the functions of the Rentenbank, whose currency was limited to domestic transactions only. The bank was also authorized to issue pound sterling currency notes, but the privilege was never exercised and was subsequently withdrawn under section 2 of the Bank Law of 1924.

The Gold Discount Bank provided foreign short-term credits for German firms out of its capital funds and through the establishment of a revolving rediscount credit of £5,000,000 in London and of \$5,000,000 in New York. The last-mentioned credit, although not used for some time after 1924, was kept open through periodical renewals and was increased to \$50,000,000 in 1928. Finally, it was used to the full extent in the critical days of July, 1931. The bank was originally authorized to discount bills drawn in dollars and sterling only, but on April 1, 1927, it was empowered to discount bills drawn in reichsmarks.

Being controlled by the Reichsbank and not forbidden to pay interest on deposits, the Gold Discount Bank acted as a subsidiary of the former and often performed such functions as the Reichsbank was prohibited by law from undertaking, particularly the shifting of short-term funds into the capital market.

The scope of activities of the Gold Discount Bank was considerably broadened by a law of December 1, 1930, which, among other things, authorized the Bank to issue bonds up to five times its capital and reserves. In time its prime function came to be the financing of foreign trade, particularly where longer credit terms were required, as in trade with Russia, Turkey, and other countries, and in the administering of blocked marks used to foster foreign trade. As noted elsewhere, the Gold Discount Bank played an important rôle in the 1932 reorganization of the banks.

State banks. The four other note-issuing banks in Germany besides the Reichsbank were the State banks—namely, the Bayerische Notenbank, the Sächsische Bank, the Badische Bank, and the Württembergische Notenbank. The note-issue privilege of these banks expired December 31, 1935. In addition to these four institutions there were other State-owned banks which did not enjoy the note-issue privilege and which, as a rule, did not operate for profit. Their principal function was to act as bankers for the several governments, and they were closely supervised by the States. The most important State bank from the standpoint of the money mar-

ket was the Prussian State Bank (Preussische Staatsbank), founded in 1772 and generally known as the "Seehandlung."

Provincial and communal banks. These were small public credit institutions whose operations were localized in the provinces, cities, and communes throughout the country. Their business resembled that of the State banks (Staatsbanken) of the smaller States. In this group were included local savings banks, central clearing institutions (Giro-Zentralen), and land banks. The clearing institutions were established to facilitate payments among the local savings banks and to connect them with the two national clearing organizations—namely, the Reichsbank and post-office clearing systems. They also acted as reserve banks for the savings banks located in their respective districts, investing the largest part of the guaranty reserves of these institutions in savings banks' acceptances and, after the liberalization of the investment provisions of savings banks in March, 1934, in treasury bills and various kinds of securities which could be purchased by the Reichsbank under the October, 1933, amendment to the Bank Law.

The private credit, or commercial, banks of Germany were divided into two groups: the incorporated and the private banks. From the legal point of view, the incorporated banks were either corporations (Aktien-Gesellschaften—A. G.) or Kommandit-Gesellschaften auf Aktien. The characteristic feature of the latter was that, in addition to the stockholders (Kommanditisten), whose liability was limited to the subscribed capital, there were partners who were personally liable with all their private property for the obligations of the company. The private banks were either general partnerships or limited companies—Gesellschaften mit beschränkter Haftung (G.m.b.H.).

The credit banks of Germany differed from the commercial banks of the United States and Great Britain in that the scope of activity of the former was much broader. The German credit banks were of the "mixed type," for they engaged in both commercial and investment banking; in other words, they granted short-term as well as long-term credits to trade and industry. They could, and actually did, engage in almost every kind of banking business, but refrained from granting mortgage credit. Each of the larger banks had a number of industrial establishments with which it was more or less identified through stock ownership. The various enterprises belonging to the sphere of influence of one particular bank looked to it for the financing of short-term as well as long-term transactions.

The purely investment functions of the banks, such as the issuance of common and preferred stocks and of bonds, greatly declined in later years. The banks also performed the functions of brokers on the stock exchanges in buying and selling securities for their own account as well as for third parties. To carry out these transactions, one or two of the senior officers of the banks were usually represented on the *Börse*. Commissions accruing from trading in securities for third parties were an important item of income to the German banks.

The commercial banking activities were similar to those carried on by commercial banks in other countries: accepting deposits, extending short-term credit, discounting trade bills, and financing stock exchange transactions through collateral loans.

Branch banking was well developed in Germany and, with the exception of the *Berliner Handels-Gesellschaft* and the *Reichs-Kredit-Gesellschaft A.G.*, all important Berlin banks had a string of branches at home—and some had branches abroad. The banking activities in foreign countries of most of the German banks, however, were carried on through overseas banks or affiliates rather than through foreign branches. In the years immediately following the First World War the German banks were very active in Holland, where they established a number of affiliate banks, but after the crisis of July, 1931, the banks adopted a policy of retrenchment, which led to the closing of competitive branches at home and the liquidation of affiliates abroad.

Reorganization of banks. German banking was marked by mergers and consolidations which affected not only the smaller institutions but also the larger banks. The mergers undertaken in the process of reorganizing the banking structure following its collapse in July, 1931, left the *Deutsche Bank* and *Disconto-Gesellschaft*, the *Dresdner Bank*, the *Commerz- und Privat-Bank Aktiengesellschaft*, the *Berliner Handels-Gesellschaft*, and the *Reichs-Kredit-Gesellschaft A.G.* as the most important banks in Berlin. The *Reichs-Kredit-Gesellschaft A.G.* was regarded as one of the large commercial banks of Berlin, although it was indirectly owned by the Government. The collapse of the "Nordwolle," the largest German textile concern, dealt a severe blow to confidence in the solidity of German business and caused a domestic run on the *Danat Bank*, which was heavily involved in the *Nordwolle Company*. Attempts to save the *Danat Bank* failed because of the lack of foresight of the Berlin banking community, which did not fully

realize the contagious character of a run. The Danat Bank suspended payments on July 13, and within a few hours the banks throughout the country were confronted with runs in spite of the government guaranty of the deposits of the Danat Bank. When it became evident that no adequate assistance would be forthcoming from the Bank for International Settlements, the government decided to resort to a drastic step not taken even during the chaotic monetary conditions of 1922 and 1923. An emergency decree issued on July 13 ordered all banks to suspend cash payments and interbank clearings during July 14 and 15. The collapse of the German banks necessitated not only the passage of a number of emergency measures by the government, but also the granting of assistance by the latter and by the Gold Discount Bank to the various individual banking institutions.

ASSISTANCE OF THE REICH AND GOLD DISCOUNT BANK IN THE
RECONSTRUCTION OF THE BANKS
(In millions of Reichsmarks)

	<i>Reich</i>		<i>Gold Dis-</i>	
	<i>(Direct)</i>	<i>(Guaranty)</i>	<i>count Bank</i>	<i>Total</i>
Dresdner Bank and Danat Bank	576.8	400.0*	50.4	1,027.2
Deutsche-Disconto Bank	..	..	57.5	57.5
Commerz- und Privat-Barmer	77.2	..	51.8	129.0
Adca	16.0	....	15.0	31.0
Norddeutsche Kreditbank	35.0	88.0	....	123.0
Landesbank der Rheinprovinz.	120.0	..	....	120.0
Deutsche Orientbank A G	15.3	7.7	....	23.0
Berliner Bank fuer Handel & Grund-				
besitz	12.3	20.5	....	32.8
Clearing Center of the German Civil				
Service Bank	..	1.3	....	1.3
Industrial Cooperatives	...	47.6	....	47.6
Deutsche-Girozentrale	..	100.0	....	100.0
Cooperative Shops	..	8.5	....	8.5
Handelsbank, A.G., Berlin	....	.5	....	.5
Gewerbebank, A.G., Treves	....	.5	....	.5
Acceptance and Guaranty Bank**	80.0	66.0	..	146.0
Other banks	..	7.9	....	7.9
Total	932.6	748.5	174.7	1,855.8

* Represent foreign obligations of the Danat Bank.

** Additional RM 46 million were subscribed indirectly through government-owned banks.

The funds required by the Gold Discount Bank for the acquisition of the stock of the reorganized banks were supplied by the Reichsbank, which placed RM 200,000,000 at the disposal of the Gold Discount Bank, for which the latter issued to the Reichsbank RM 200,000,000 of new class "C" shares.

Bank Law of 1934. The Bank Law promulgated by the Government on December 5, 1934, constituted in its main features a continuation and broadening of the banking supervision instituted in September, 1931. The law applied to all credit institutions except the Reichsbank, the Gold Discount Bank, the Reichspost (postal check accounts), and housing-financing institutions. All domestic credit institutions and branches of foreign credit institutions operating in Germany were subject to supervision by the authorities created by this law.

Credit Supervision Board. Supervision over the banks was exercised by the Credit Supervision Board (Aufsichtsamt fuer das Kreditwesen) and the Reich Commissioner for Credit (Reichskommissar fuer das Kreditwesen), who replaced the banking board and banking commissioner established in September, 1931. The Credit Supervision Board was attached to the Reichsbank. It consisted of seven members: (1) the president of the Reichsbank as chairman, (2) the Reichsbank vice-president as deputy chairman, (3) a person to be appointed by the Chancellor, and (4) the state secretaries of the Ministries of the Interior, Finance, Economic Affairs, and Food. The Reich Commissioner for Credit was not a member but was entitled to attend sessions in an advisory capacity.

Authority to make decisions and issue orders was vested in the chairman of the Board. The functions of the other members were chiefly of a consultative character. Doubtful cases, however, or cases in which the decision of the chairman was opposed by a member of the Board, were referred to the Reich Cabinet for decision. Certain decisions of the Commissioner could be appealed by the banks to the Board, and such appeals were decided, by a simple majority vote, by the members.

Besides the specific duties and powers of the Board relating to capital structure, liquidity, and the clearing system, the law gave the Board a blanket authority over all banking affairs. Section 32 of the Act stated that it was the duty of the Board to eliminate abuses in banking, to take proper measures when a bank got into difficulties, and to require independent auditing of the yearly balance sheets of all credit institutions. The Board could issue basic rules governing the management of the banks, and was given the authority up to the end of 1935 to order cessation of certain or all operations by any credit institutions whenever such action was deemed necessary for "a more purposeful organization of the credit system."

Reich Commissioner for Credit. The Commissioner was an administrative official appointed by the Chancellor upon consultation with the president of the Reichsbank. In addition to the duties and powers vested in his predecessor, the banking commissioner, the Reich Commissioner for Credit was entrusted with the administration of the licensing system introduced by the Bank Law

The law required a license issued by the Reich Commissioner for the establishment of new banks, branches, and agencies, and clearing institutions. Credit institutions established before July 1, 1934, needed no permit. A license could be refused (1) for personal unfitness of the management, (2) when the resources were not available within Germany, (3) when general economic conditions did not justify the organization of new banks. The Commissioner could close a bank (1) when the information supplied with the application for the license was false, (2) on the ground of insufficient reliability of the management, (3) for violation of public interest, and (4) for insufficient guaranty of the safety of deposits and investments. Appeal against refusal or revocation of a license and against an order for discontinuation of business could be taken to the Credit Supervision Board.

The law also stipulated that the total liabilities of a credit institution, less liquid assets of the first and second classes, could not exceed a certain percentage of the capital. The ratio varied for the different types of credit institutions, but all banks were permitted to maintain a ratio of five times the amount of their capital.

Holdings of stocks, except those representing permanent participation in a company, and of bonds not listed on German stock exchanges, were limited to a certain percentage of total liabilities less deposits.

Unsecured credits exceeding RM 5,000 could be made only when the borrower revealed his financial condition, and credits granted to a single borrower could not exceed a certain percentage of the bank's capital. The percentage was fixed by the Board. The law considered all affiliated companies as a single borrower. When the total indebtedness of a borrower at one credit institution exceeded the sum of RM 1,000,000 during a month, it was termed "large credit" (Gross-kredit) and had to be reported monthly to the Commissioner. When a borrower had obtained credits at several institutions, the Commissioner could inform these institutions of the total indebtedness of the borrower and of the number of institutions involved.

Questions for Study and Review

- 1 How did the post-war inflation affect the German banks?
2. What were the chief functions of the Reichsbank?
- 3 State the conditions under which Lombard loans could be made by the Reichsbank
- 4 State the three means of credit control available to the Reichsbank, and explain how each was used
- 5 What was the chief function of the Gold Discount Bank?
- 6 What were the powers of the Credit Supervision Board, of the Reich Commissioner for Credit?

Problems

The statement of the German Reichsbank as of January 15, 1940 showed:

Gold and foreign exchange	Reichsmarks	77,457,000
Bills of exchange, checks, and Treasury bills	"	10,866,891,000
Notes in circulation	"	11,040,475,000
Daily maturing obligations	"	1,641,206,000

1. How many reichsmarks in gold and foreign exchange were available against: (a) each 1,000 reichsmarks of notes in circulation; (b) each 1,000 reichsmarks of notes in circulation and demand liabilities?
2. On the basis of the above statement, calculate the amount of gold and of foreign exchange to be acquired by the Reichsbank in order to maintain a 35% reserve against total demand liabilities.
- 3 The item "daily maturing obligations" was equivalent to our term "demand deposits." Who were the depositors?

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CHAPTER 32

The Canadian Banking System

Introduction. The Canadian banking system is composed of (1) the Bank of Canada, established in 1934; (2) the Chartered Banks, which have their legal foundation in the Dominion Bank Act of 1871; (3) the Dominion Government savings banks; (4) the Quebec savings banks; (5) the coöperative people's banks; and (6) the Industrial Development Bank. The Canadian banking system is the result of a process of gradual growth and development extending over more than a century. The banking development in Canada has been influenced not merely by geographical, political, and economic conditions prevailing within the Dominion but also by developments in the United States and in Great Britain. As a matter of fact, the first modern bank in Canada, the Bank of Montreal, whose charter was granted in 1822, followed closely the principles embodied in the first Bank of the United States. The Canadian banking system has met its test during periods of prosperity and depression. In contrast to its southern neighbor, where the unit banking system prevails and where bank failures are quite common, Canada has from the early stages adopted the branch banking system, and bank failures have been rare. Following is a discussion of the individual types of financial institutions in existence in Canada.

The Bank of Canada. The Bank of Canada is one of the latest central banks to be established in the Dominions of the British Commonwealth of Nations. The Bank was created by the Bank of Canada Act of July 3, 1934, amended by the Acts of June 23, 1936, and July 1, 1938, and began operations on March 11, 1935. The head office of the Bank is in Ottawa, but the Bank has the

power to establish branches and agencies within Canada and, with the approval of the Governor in Council, to establish branches and appoint agents outside of the Dominion. The establishment of the Bank of Canada was the result of a careful investigation of the banking and currency situation conducted by the so-called Mac-Millan Committee.

Organization. The Bank of Canada is under the management of a Board of Directors composed of a Governor as chairman, Deputy Governor, and eleven directors appointed in accordance with the provisions of the Act. There may also be an Assistant Deputy Governor, who shall not as such be a member of the board. In addition to the members of the board, the Deputy Minister of Finance, or a person delegated by him, is *ex officio* a member of the board but has no right to vote. The first Governor, Deputy Governor, and Assistant Deputy Governor were appointed by the Governor in Council. Future appointments of the Governor, Deputy Governor, and Assistant Deputy Governor will be made by the directors with the approval of the Governor in Council. According to Article 6 of the Bank of Canada Act, no person may hold the office of Governor, Deputy Governor, or Assistant Deputy Governor who:

- (a) is not a British subject; or
- (b) is a member of either House of Parliament or of a Provincial Legislature; or
- (c) is employed in any capacity in the public service of Canada or of any Province of Canada or holds any office or position for which any salary or other remuneration is payable out of public moneys; or
- (d) is a director, officer, or employee of any other bank or financial institution or has an interest as a shareholder in any bank or other financial institution; or
- (e) has reached the age of seventy-five years.

These provisions were intended to keep the management of the Bank entirely free from politics and its policies uninfluenced by the chartered banks. The Governor is the chief executive officer of the Bank.

Directors. The directors must represent various occupations, but no person is eligible to be a director "who is a director, officer or employee of a chartered bank and any person elected or appointed as a director who is a shareholder of a chartered bank shall divest

himself of ownership of his shares within three months of the date of his election or appointment and shall not thereafter during the term of his office have an interest, either directly or indirectly, as a shareholder in a chartered bank " Directors must be British subjects ordinarily resident in Canada, must not be employed in any capacity in the public service of Canada or any province of Canada, and must be below the age of seventy-five The directors are appointed by the Minister of Finance with the approval of the Governor in Council for a three-year term and are eligible for reappointment.

Executive committee. The actual management of the Bank is vested in an executive committee of the board, composed of the Governor, the Deputy Governor, and one director elected by the board. In addition, the Deputy Minister of Finance or a person delegated by him is *ex officio* a member of the executive committee but has no power to vote. The executive committee has the power to deal with all matters within the competence of the board, but every decision must be submitted for approval to the board at its next meeting. Except when the board is in session, the executive committee has the power to fix the discount rate of the Bank of Canada.

Capital. The capital of the Bank is \$5,000,000, but may be increased from time to time pursuant to a resolution passed by the Board of Directors and approved by the Governor in Council and by the Parliament of Canada. The capital is divided into 100,000 shares of the par value of \$50 each, issued to and held by the Minister of Finance on behalf of the Dominion of Canada. Prior to the July 1, 1938, amendment, the capital of the Bank was \$10,100,000 and consisted of 100,000 Class A shares owned by the public and 102,000 Class B shares held by the Minister of Finance. On August 15, 1938, capital stock of a par value of \$5,100,000 was redeemed, and since that date the Dominion of Canada has owned all the capital stock of the Bank of Canada.

Functions of the Bank. The functions of the Bank, as prescribed by Section 21 of the Law, as amended, are as follows:

Coin and bullion. The Bank may buy and sell gold, silver, nickel, and bronze coin and gold and silver bullion.

Exchange. The Bank may effect transfers of funds by telegram, letter, or other method of communication, and buy and sell transfers effected by such means, buy and sell trade acceptances, bankers' acceptances, bankers' drafts, and bills of exchange drawn in or on places outside of Canada and having a

maturity not exceeding ninety days, excluding days of grace, from the date of acquisition by the Bank.

Investments. The Bank may:

- (1) buy and sell or rediscount short-term securities issued or guaranteed by the Dominion of Canada or by any Province, having a maturity not exceeding two years from the date of acquisition by the Bank;
- (2) buy and sell securities issued or guaranteed by the Dominion of Canada or any Province, having a maturity exceeding two years from the date of acquisition by the Bank, but the Bank shall at no time hold securities not maturing within two years having a par value in excess of 50 per cent of its outstanding note issue and deposit liabilities, nor shall the Bank at any time hold securities not maturing within ten years of a par value in excess of five times the amount of the paid-up capital and rest fund (surplus) of the Bank;
- (3) buy and sell short-term securities issued by the United Kingdom, any British Dominion, the United States of America, or France, having a maturity not exceeding six months from the date of acquisition by the Bank;
- (4) buy and sell securities issued by the United Kingdom or the United States of America, having a maturity exceeding six months from the date of acquisition by the Bank, but the Bank shall at no time hold such securities of a par value in excess of one-half of the amount of its paid-up capital.

Discounts. The Bank may:

- (1) buy and sell or rediscount bills of exchange and promissory notes, endorsed by a chartered bank, drawn or issued in connection with the production or marketing of goods, wares, and merchandise as defined in the Bank Act, excepting those mentioned in paragraph (2) of this subsection, and having a maturity not exceeding ninety days, excluding days of grace, from the date of acquisition by the Bank;
- (2) buy and sell or rediscount bills of exchange and promissory notes endorsed by a chartered bank, drawn or issued in connection with the production or marketing of products of agriculture, the forest, the quarry and mine, or the sea, lakes and rivers, as defined in the Bank Act, and having a maturity not exceeding one hundred and eighty days excluding days of grace from the date of acquisition by the Bank. Provided that the Bank may by regulation limit to a percentage of its total assets the amount of such paper having a maturity in excess of ninety days excluding days of grace but not exceeding one hundred and eighty days, excluding days of grace, from the date of acquisition by the Bank.

Loans and advances. The Bank may:

- (1) make loans or advances for periods not exceeding six months to chartered banks or to banks incorporated under the Quebec Savings Banks Act on the pledge or hypothecation of the foregoing classes of securities, bills of exchange or promissory notes, or of Canadian municipal securities, or of securities issued by a school corporation or parish trustees, or of securities issued pursuant to the statutes of a Province making provision for the payment thereof and the interest thereon by the Province, or of gold or silver coin or bullion, or documents of title relating thereto;
- (2) make loans or advances for periods not exceeding six months to the Dominion Government or the government of any Province on the

pledge or hypothecation of readily marketable securities issued or guaranteed by the Dominion of Canada or any Province,

- (3) make loans to the Dominion Government or the government of any Province, but such loans outstanding at any one time shall not, in the case of the Dominion Government, exceed one-third of the estimated revenue of such Government for its fiscal year, and shall not in the case of any provincial government exceed one-fourth of such government's estimated revenue for its fiscal year, and such loans shall be repaid before the end of the first quarter after the end of the fiscal year of such government

Open market operations. Following the example of the Federal Reserve Act, the Bank of Canada Act empowers the Bank, for the purpose of its open market operations, to buy and sell in the open market from or to any person, either in or outside of Canada, securities, cable transfers, bankers' acceptances, and bills of exchange of the kinds and maturities that are defined as eligible for rediscount, with or without the endorsement of a chartered bank.

Deposits. The Bank may accept from the Dominion Government, or the government of any Province, or from any chartered bank, or from any banks incorporated under the Quebec Savings Banks Act, deposits which shall not bear interest. It may also open accounts in a central bank in any other country or in the Bank for International Settlements and act as agent, depository, or correspondent of such other central banks or the Bank for International Settlements. The Bank may acquire real or immovable property only for the actual use and occupation by the Bank in connection with its business. The Bank of Canada Act (Section 22) forbids the Bank to engage in any trade or business, to purchase its own stock or the shares of any other bank except the Bank for International Settlements, or to make any loans on bank shares. The Bank is also prohibited from making loans secured by real estate or making advances without security, except to the Dominion or a provincial government as stated above. The Bank is further prohibited from receiving time deposits or paying any interest on its deposits. The Bank acts as fiscal agent of the government without charge.

Note issue. Prior to the organization of the Bank of Canada, the note-issue privilege in the Dominion of Canada was exercised jointly by the Canadian Treasury and the chartered banks. With the opening of the Bank of Canada the authority of the Treasury to issue notes was rescinded and that of the chartered banks was limited. The issue of Dominion notes was formerly under the

control of the Department of Finance and was subject to the following limitations:

- (1) Notes could be issued up to \$120,000,000 against a reserve of 25 per cent in gold
- (2) \$26,000,000 was issued during the First World War, against which \$16,000,000 in specified railway securities, guaranteed by the Canadian Government, was held
- (3) Under the Finance Act of 1914 Dominion notes could be issued in an unlimited amount to the chartered banks and to savings banks in the province of Quebec in the form of advances against the deposit by the institutions of such securities as were defined in the Act.
- (4) An unlimited amount could be issued against a reserve of 100 per cent in gold.

Dominion notes were convertible into gold, but on March 30, 1933, an amendment to the Dominion Notes Act empowered the Governor General to suspend redemption of Dominion notes in gold, and on April 10, 1933, gold redemption was suspended for one year. Suspension has been extended from time to time and is still in effect.

Chartered banks were authorized to issue notes in denominations of \$5 and multiples thereof, subject to the following regulations:

1. Up to the amount of their paid-in capital. Such notes were subject to a tax of one per cent of the amount in circulation.
2. During the period from each September 1 to the end of the following February, an additional amount equivalent to 15 per cent of the unimpaired capital and surplus. These notes were subject to a tax of 5 per cent of the amount in circulation. The additional issue was to meet seasonal needs and could be issued only during the crop-moving season when the demand for currency increases.
3. An unlimited amount against a reserve of 100 per cent in gold and Dominion notes deposited with the Central Gold Reserve.

Bank notes were redeemable in Dominion notes on demand and, although they were not legal tender, circulated throughout the country at par.

Bank of Canada note issue. Under the Bank of Canada Act notes of the chartered banks in circulation were reduced by 5 per cent per annum during the five-year period commencing January 1, 1936, and by 10 per cent per annum during the next five-year period, so that in January, 1946, such notes did not amount to

more than 25 per cent of the unimpaired paid-up capital of the banks. In addition, the emergency note-issue privilege was rescinded as of the date of opening of the Bank of Canada. The Bank Act of 1944 provided that after January 1, 1945, no chartered bank shall issue or re-issue its own notes for circulation in Canada, and that after January 1, 1950, the banks' liability for their notes which then remain outstanding in Canada shall be transferred to the Bank of Canada in return for payment of an equal amount to the Bank of Canada. Thus the right of the chartered banks to issue notes for circulation in Canada has been terminated as from January 1, 1950.

Between December 31, 1935, and the end of the year 1944, chartered bank notes in circulation decreased from \$111,000,000 to \$33,000,000, while Bank of Canada note circulation increased from \$59,100,000 to \$896,600,000. The amount of Bank of Canada and chartered bank notes in the hands of the public increased from \$246,800,000 at the end of the year 1939 to \$929,600,000 on December 31, 1944.

With the exception of the notes issued by the chartered banks under the Finance Act, the Bank of Canada upon its opening assumed responsibility for all Dominion notes outstanding. The chartered banks, however, were required to repay the advances under the Finance Act with Dominion notes, which in turn were canceled by the Treasury and thus eliminated from the currency system. Under the Bank of Canada Act, Section 24, the Bank of Canada, with the exception already noted, has the sole right to issue notes. Notes issued by the Bank of Canada are legal tender and constitute the first lien upon all the assets of the Bank. Under the Bank of Canada Act, Canada is on the gold bullion standard, and the Bank is under obligation to sell gold at its head office in amounts of about 400 fine ounces or more. However, this provision of the Act, which is subject to suspension by the Governor in Council for such periods as he may deem desirable, did not go into effect, and Canada today is on an unredeemable paper basis.

When the Bank commenced business, the Minister of Finance transferred to it all gold, silver, and securities held as a reserve against Dominion notes except the reserve against Dominion notes issued under the Finance Act. During the years 1935, 1936, 1937 the Bank was required to purchase and hold newly mined Canadian silver as and when required to do so by the Minister of Finance, but it might not be required to buy more than 1,671,802 fine ounces in

any one year. This silver, together with that turned over to the Bank upon its opening, could be included among the reserves at the current market price.

The gold transferred to the Bank upon its opening was valued at \$20.67 per ounce—that is, mint-par. However, in accordance with the Exchange Fund Act of July 5, 1935, the gold has been revalued at the “price of gold in London or New York converted into currency at the current rate of exchange.” The effect of this measure on the gold holdings of the Bank was an increase from \$106,671,415 on July 3, 1935, to \$180,179,470 on July 10, 1935. Of the total profit of about \$73,500,000 thus derived, \$63,000,000 accrued to the Dominion Treasury and \$10,500,000 to the chartered banks in accordance with article 30 of the Bank of Canada Act. This article provides that, in case of any increase in the value of gold resulting from a change in the monetary standard of Canada, such profits shall be paid to the Treasury, except that “if the Governor in Council is satisfied that the said gold was at the time of the transfer being held by a chartered bank against liabilities elsewhere than in Canada—the said profit shall belong to the chartered bank.”

Under the Exchange Fund Act, the Treasury's share of this gold profit has been allocated as an exchange fund to regulate the foreign exchange value of the Canadian dollar, but no use will be made of this fund until a proclamation to that effect has been issued by the Government. The July 10, 1935, weekly statement of the Bank of Canada showed that pending this proclamation about \$51,500,000 was used to reduce the Bank's holdings of Dominion securities, and \$10,900,000 was used to increase the deposits of the Government. The disposition of the share of the chartered banks in the profits was reflected in the chartered bank deposits, which increased from \$171,306,000 on July 3, to \$183,169,000 on July 10, 1935.

Reserve against notes in circulation. The reserves which the Bank of Canada must maintain against notes in circulation must consist of gold coin and bullion in the unrestricted ownership of the Bank equal to an amount not less than 25 per cent of the notes and deposit liabilities. In accordance with the Exchange Fund Order of April 30, 1940, the Bank sold on May 1, 1940, its gold holdings of 5,888,565 fine ounces valued at \$225,772,887, to the Foreign Exchange Control Board. The same Order provided for temporary suspension of the Bank's minimum gold reserve requirement. In addition, the reserves may include:

- (a) silver bullion received from the Minister, and which was held by him for redemption of Dominion notes, and newly-mined Canadian silver purchased at the instruction of the Minister of Finance, valued at the market price of the fine silver content thereof; and
- (b) foreign exchange, which shall mean
 - (1) balances in pounds sterling, United States of America dollars and currencies which by law and in fact are convertible on demand at a fixed price into exportable gold, held in the Bank of England, the Federal Reserve Bank of New York, the Bank for International Settlements or a central bank in any country the currency of which is convertible as hereinbefore described;
 - (2) Treasury bills or other obligations of the United Kingdom or the United States of America having a maturity not exceeding three months from the date of acquisition by the Bank;
 - (3) bills of exchange having a maturity not exceeding ninety days excluding days of grace, or not exceeding ninety days after sight excluding days of grace, from the date of acquisition by the Bank payable in pounds sterling, United States of America dollars, or in a currency which by law and in fact is convertible on demand at a fixed price into exportable gold, less any liabilities of the Bank payable in the currency of the United Kingdom, the United States of America, or any country, whose currency is by law and in fact convertible on demand at a fixed price into exportable gold.

At the request in writing of the board of directors of the Bank, the Governor in Council may suspend the reserve requirements as regards gold. Such suspension, however, may be for a period not exceeding 60 days, but on the further request in writing by the board of directors, it may be extended from time to time for further periods not exceeding 60 days, provided, however, that if a suspension is to be longer than one year, it needs the sanction of Parliament. This section of the Bank of Canada Act is similar to the provisions regulating the Bank of England, under which it may increase the amount of the fiduciary issue.

The chartered banks of Canada are under obligation to maintain a reserve of not less than 5 per cent of their deposit liabilities payable in Canadian dollars in the form of a deposit with the Bank of Canada. The reserve may also consist of Bank of Canada notes held by the banks.

Profits of the Bank. The Bank must establish a rest fund, and after making provisions for bad and doubtful debts, depreciation, and pension funds, a cumulative dividend of $4\frac{1}{2}$ per cent per annum is to be paid on the capital stock. The remainder is divided as follows:

- (a) If the rest fund of the Bank is less than the paid-up capital, one-third of such surplus shall be allocated to the rest fund and the residue shall be paid to the Receiver General and placed to the credit of the Consolidated Revenue Fund;
- (b) If the rest fund is not less than the paid-up capital but is less than twice the paid-up capital, one-tenth of such surplus shall be allocated to the rest fund and the residue shall be paid to the Receiver General and placed to the credit of the Consolidated Revenue Fund;
- (c) If the rest fund is not less than twice the paid-up capital, the whole of such surplus shall be paid to the Receiver General and placed to the credit of the Consolidated Revenue Fund

The table on page 598 shows a monthly statement of the Bank of Canada.

The chartered banks. The modern banking system of Canada dates from 1871, when the Banking Act of 1871 was passed. The Act provided that bank charters might be granted for a period of 10 years. This in turn has led to approximately decennial revisions of the Bank Act, which have taken place in 1881, 1891, 1901, 1913, 1923, 1934, and 1944. Although the Banking Act of 1871 has been amended a number of times, it still is the basis upon which the chartered banks of Canada operate. According to an amendment of the Banking Act passed June 28, 1934, the minimum capital requirement for a bank in Canada is \$500,000, all of which must be subscribed and \$250,000 of which must be paid in before the bank may open. The shares of the chartered banks must be of a par value of \$100 and bear double liability.

Powers of the chartered banks. Under Section 75 of the Bank Act as amended in 1944, the banks may

1. (a) open branches, agencies and offices;
- (b) engage in and carry on business as dealers in gold and silver coin and bullion;
- (c) deal in, discount and lend money and make advances upon the security of, and take as collateral security for any loan made by it, bills of exchange, promissory notes and other negotiable securities, or the stock, bonds, debentures and obligations of municipal and other corporations, whether secured by mortgage or otherwise, or Dominion, provincial, British, foreign, and other public securities;
- (d) lend money or make advances upon the security of and take as collateral security for any loan or advance made by it, lien or other notes, conditional sales contracts or any other instruments or agreements made or entered into respecting the sale of goods, wares and merchandise, or moneys payable thereunder; and
- (e) engage in and carry on such business generally as appertains to the business of banking.

BANK OF CANADA

MONTHLY STATEMENT OF ASSETS AND LIABILITIES AS AT AUGUST 31ST, 1945

<i>Liabilities.</i>		<i>Assets</i>	
1. Capital Paid Up		1 Reserve*	
2. Res. Fund.		*Gold coin and bullion	
3. Notes in Circulation		Silver bullion	
4. Deposits		Sterling and U S A dollars	\$ 176,079,962 33
(a) Dominion Government	\$ 32,640,674 91	Other currencies, of countries	
(b) Provincial Governments		on a gold standard	
(c) Chartered Banks	444,380,387 42	Total	\$ 176,079,962 33
(d) Other	39,734,695 13	2 Subsidiary coin	392,271 11
Total	518,755,757 46	3 Bills Discounted	
5. Liabilities Payable in Sterling, U.S.A. and Foreign		4 Advances to	
Gold Currencies.		(a) Dominion Government	
(a) Deposits	176,079,962.33	(b) Provincial Governments	
(b) Other		(c) Chartered and Savings	
Total	176,079,962 33	Banks	
6. All Other Liabilities	48,037,067.91	Total	
		5. Bills Bought in Open Market, not including Treasury Bills.	
		6. Investments:	
		(a) Dominion and Provincial Government short term securities	1,031,454,680 96
		(b) Other Dominion and Provincial Government securities	584,022,382 31
		(c) Other securities	10,000,000 00
		Total	
		7. Bank Premises	1,625,477,063 27
		8. All Other Assets	1,944,665 00
		Total	49,944,914 02
Total	\$1,533,835,575.73	Total	\$1,853,838,875 73

* In accordance with the Exchange Fund Order of April 30, 1940 the Bank transferred its gold holdings to the Foreign Exchange Control Board in exchange for government securities.

2. Except as authorized by this Act, the bank shall not either directly or indirectly
- (a) deal in the buying or selling or bartering of goods, wares and merchandise, or engage or be engaged in any trade or business whatsoever,
 - (b) purchase, or deal in, or lend money or make advances upon the security or pledge of, any share of its own capital stock, or of the capital stock of any bank,
 - (c) lend money or make advances upon the security, mortgage or hypothecation of any lands, tenements or immovable property, or of any ships or other vessels, or upon the security of any goods, wares and merchandise;
 - (d) lend to or on the security of the general manager, assistant general manager, branch manager, or any officer, clerk or servant of the bank without the approval of the directors any amount or amounts exceeding in the aggregate one thousand dollars;
 - (e) lend to or on the security of the general manager, assistant general manager, branch manager, or any officer, clerk or servant of the bank any amount or amounts exceeding in the aggregate ten thousand dollars;
 - (f) lend money or make advances in excess of five *per centum* of its paid-up capital to a director of the bank or to any firm, company or corporation in which the president, general manager or a director of the bank is a partner or shareholder, as the case may be, without the approval of two-thirds of the directors present at a regular meeting, or meeting specially called for the purpose, of the board

Section 88 of the Act was amended in 1944 to enable the banks to make loans to farmers for purchase of agricultural implements and equipment; installation, alteration, or improvement of farm electric systems; erection or construction of fencing or drainage works; construction, repair, or alteration of, or making additions to any building or structure on a farm, and for any works for the improvement or development of a farm for which a farm improvement loan as defined in the Farm Improvement Loans Act of 1944 may be made. This act aims to insure that the above credit facilities will be available to farmers on the installment plan at a maximum rate of 5 per cent simple interest per annum by providing a Dominion Government guaranty of 10 per cent of the aggregate loans made by a bank. This guaranty is limited to \$250,000,000 of loans made by all banks within a three-year period.

Included in Section 88 is also a provision authorizing the banks to make loans to fishermen on the security of fishing vessels, fishing equipment, and supplies or products of the sea, lakes, and rivers. This is obviously aimed to aid seamen released from the Navy or Merchant Marine to equip themselves as fishermen, as well as to improve ships and equipment of the fishing industry.

Operation of branches. The right to operate branches and the relatively large capital requirements are responsible for the fact that

banking in Canada is carried on by a small number of banks with branches throughout the country. At the end of 1941 there were 10 chartered banks in operation in the Dominion, with an aggregate of 2,695 branches and 605 sub-agencies in Canada, as compared with 38 banks with a total of 530 branches in 1895. The reduction in the number of banks has been the result partly of failures, partly of combinations, and partly of voluntary liquidations. From 1867 to the end of 1935 only 26 banks were liquidated in Canada, with resultant losses to depositors and other creditors of \$7,347,000. There have been no failures or liquidations, and there has been only one combination since 1923. The table on page 601 shows the number of branches of chartered banks in Canada at the end of 1941. In addition, the Canadian chartered banks have a number of branches outside of Canada, as may be seen from the other table on the same page.

The branch banking system in Canada is organized more or less in the same manner as the British banking system. As a rule, branch managers have authority to make loans up to certain maximum amounts without obtaining prior approval from the higher authorities. The maximum fixed does not apply to all branches, but varies according to the size of the branch and the experience of the manager. As is the case in all branch banking systems, the funds not used by an individual branch are credited to the account of the head office and are used either for the purchase of securities or for the making of loans by other branches. The branch manager makes special reports on all doubtful loans and submits with these reports his own estimate of how much of the loans concerned may be recoverable. Each branch is inspected at least once a year and at irregular intervals by bank inspectors.

Deposits. The deposits of the Canadian banks may be divided into two categories—namely, current accounts and savings accounts. Savings accounts are also called notice deposit accounts, as these funds cannot legally be withdrawn without giving notice (usually notice of 15 days). In practice, however, the banks do not insist upon this legal right of notice. The banks must maintain a reserve in the form of deposits with the Bank of Canada and Bank of Canada notes of not less than 5 per cent of their deposit liabilities in Canada. Banks in Canada are under the supervision of the Inspector General of Banks, who is appointed by the Governor in Council on the recommendation of the Minister of Finance. The Inspector General is under obligation to examine the banks at least

NUMBER OF BRANCHES OF CHARTERED BANKS IN CANADA AT END OF 1941*

Name of Bank	Prince Edward Island	Nova Scotia	New Brunswick	Yukon	Quebec	Ontario	Manitoba	Saskatch- ewan	Alberta	British Columbia	Total
Bank of Montreal.....	1	13	13	2	110	185	27	34	41	46	472
Bank of Nova Scotia.....	8	35	34	—	22	119	6	15	9	6	254
Bank of Toronto.....	—	—	—	—	15	109	11	23	7	10	175
Banque Provinciale du Canada...	3	—	12	—	108	14	—	—	—	—	137
Canadian Bank of Commerce...	6	17	6	3	60	229	34	49	38	62	504
Royal Bank of Canada.....	6	63	22	—	78	214	56	74	44	47	604
Dominion Bank.....	—	—	1	—	8	100	11	4	3	4	131
Banque Canadienne Nationale...	—	—	—	—	203	12	4	2	—	—	221
Imperial Bank of Canada...	—	—	—	—	4	124	8	26	21	12	195
Barclays Bank (Canada).....	—	—	—	—	1	1	—	—	—	—	2
Total.....	24	128	88	5	609	1,107	157	227	163	187	2,695

* Exclusive of 805 sub-agencies.

NUMBER OF BRANCHES OF CHARTERED BANKS OUTSIDE OF CANADA AT END OF 1941

Name of Bank	United Kingdom	United States	Newfoundland	West Indies*	South and Central America	Total
Bank of Montreal.....	2	3	6 [±]	—	—	11
Bank of Nova Scotia.....	1	2	12	22**	—	37
Canadian Bank of Commerce.....	1	5	2	4	—	12
Royal Bank of Canada.....	2	1	7***	42	21	73
Dominion Bank.....	1	1	—	—	—	2
Total****	7	12	27	68	21	135

* Including Cuba and Puerto Rico.

** Exclusive of one sub-agency

† Exclusive of two sub-agencies.

*** Exclusive of one sub-agency

**** Exclusive of four sub-agencies.

THE CANADIAN BANKING SYSTEM

 POSITION OF THE CHARTERED BANKS
 (AVERAGE MONTHLY DATA IN MILLIONS OF DOLLARS)

<i>Assets*</i>	1929	1932	1937	1938	1939	1940	1941
Cash reserves against Canadian deposits*	212	186	240	252	268	287	308
Notes of other Canadian banks	17	11	6	6	5	4	3
Deposits at other Canadian banks	5	3	5	4	4	4	3
Gold and coin abroad, and foreign currencies	44	35	27	32	37	34	35
Deposits at United Kingdom and other foreign banks	91	107	120	134	215	183	190
Dominion and Provincial Government securities	342	490	1,119	1,143	1,234	1,312	1,483
Other Canadian and foreign public securities	104	151	182	170	180	157	149
Other bonds, debentures, and stocks	53	55	126	126	126	110	94
Call and short loans	568	201	175	118	102	88	78
Current loans	1,703	1,369	1,014	1,073	1,133	1,228	1,319
Non-current loans	8	12	12	10	9	8	5
Other assets	381	249	291	281	279	292	341
Total	3,528	2,869	3,317	3,349	3,592	3,707	4,008
<i>Liabilities.</i>							
Notes in circulation	178	132	110	100	94	91	82
Government deposits	102	82	90	95	146	227	322
Public deposits	2,594	2,174	2,685	2,729	2,915	2,952	3,143
Interbank deposits	141	66	65	68	83	71	62
Total deposit liabilities	2,837	2,322	2,840	2,892	3,144	3,250	3,527
Advances under the Finance Act	83	37	..	..	..	..	..
Other liabilities to the public	117	55	76	64	60	70	103
Capital	137	145	146	146	146	146	146
Surplus	151	162	133	134	134	134	134
Total**	3,503	2,853	3,305	3,336	3,578	3,601	3,992

* The cash reserves include, prior to March 11, 1935, the gold and coin and Dominion notes held by the banks in Canada and the deposits in the Central Gold Reserves not earmarked against the issue of bank notes, and, since the above date, notes of and deposits with the Bank of Canada.

** Total assets and total liabilities shown in the table are not equal because the data are taken from monthly reports made by the banks to the Minister of Finance, and these reports do not include the item "undivided profits."

once each calendar year. The powers of the inspector, as far as examinations of banks are concerned, correspond to those of the bank examiners in the United States.

The table on this page shows the average monthly amounts reported for the principal items in the statements of the ten chartered banks, combined, during the years indicated.

Dominion Government savings banks. Prior to 1929 there existed in Canada two classes of government savings institutions—namely, the Post Office Savings Bank under the Post Office Department, and the Government Savings Bank attached to the Minister

of Finance. The former was established under the Post Office Act of 1867, for the purpose of enlarging "the facilities now available for the deposit of small savings, to make the Post Office available for that purpose and to give the direct security of the Dominion to every depositor for repayment of all money deposited by him together with interest due thereon." In establishing the Post Office Savings Bank, the Dominion Government followed the example of a number of European countries where the facilities of the post office have been utilized for the purpose of gathering the savings of the nation. The Government Savings Bank, proper, established a number of branches in the leading cities of Canada. It was amalgamated in 1929 with the Post Office Savings Bank. In 1933 the Post Office Savings Bank had over 1,300 offices. Sums of \$1.00 or more may be deposited, but the maximum sum which may be received from any one depositor in one year may not exceed \$1,500, and the total amount which may be received to the credit of any depositor may not exceed \$5,000, exclusive of interest. At the end of 1940 the Post Office Savings Bank had about \$22,000,000 in deposits.

Provincial government savings banks. In addition to the saving facilities offered by the Dominion Government, the Provinces of Ontario and Alberta operate provincial government savings banks.

Quebec savings banks. There are two institutions operating under the Quebec Savings Bank Act passed in 1927—namely, the Montreal City and District Savings Bank and La Caisse d'Économie de Notre Dame de Quebec. The former was founded in 1846, and its present charter dates from 1871. The second was founded in 1848 and was incorporated by act of the Canadian legislature in 1855. These two institutions occupy a special position in the Canadian financial structure. To some extent they have been brought under restrictions similar to those applying to the chartered banks. For instance, the "shareholders' audit" was introduced into the Quebec Savings Banks Act in 1913 at the time it was embodied in the Bank Act. Both Acts are subject to decennial revision. On the other hand, the shares do not entail double liability, and the right of note issue has never been conferred upon these institutions. As in the case of the chartered banks, these two banks have not been allowed to invest in real estate, except for their own use, but their ordinary "commercial banking" business is so

small that some two-thirds of their funds have been invested in Government and municipal securities. They are essentially "savings" banks.

The coöperative people's banks. The coöperative people's banks were founded by Commander Desjardins, and follow closely the pattern of the people's banks in existence for many years in Italy. Although established primarily for the purpose of providing farmers with consumers' credit, they are not strictly rural institutions, in that membership is not limited to farmers. However, farmers compose a large percentage of their membership. They lend only to their shareholders, who have the right of making a deposit over and above the amount of the shares owned by them. While they do not aim to do a mortgage business, loans on first mortgages on immovable property are often made. In addition, they make loans to their members on personal security.

The Industrial Development Bank. On August 11, 1944, the Canadian Parliament passed the Industrial Development Bank Act for the purpose of "supplementing the activities of other lenders and providing capital assistance to industry with particular consideration to the financing problems of small enterprises," in which "the manufacture, processing or refrigeration of goods, wares and merchandise or the building, alteration or repair of ships or vessels or the generating or distributing of electricity is carried on."

The Bank is conceived as a wholly owned subsidiary of the Bank of Canada, with the governor of the Bank of Canada its president and the board of directors drawn from the Bank of Canada directors. The Bank, which commenced operations on November 1, 1944, has an authorized capital of \$25,000,000 subscribed by the Bank of Canada of which amount \$10,000,000 has been paid in. The Bank is authorized to issue bonds and debentures, which are eligible for purchase by the Bank of Canada, and to assume contingent liabilities in the form of guaranties or underwriting agreements up to an aggregate amount not exceeding at any time three times the paid-up capital and the Reserve Fund. The latter is to be established with the net profits of the Bank. The Act provides that the whole of the net profits shall be credited to the Fund until it equals the paid-up capital of the Bank. Subsequently, the net profits may be used for payment of a dividend not exceeding 4 per cent on the paid-up capital. Any surplus remaining after the payment of such dividend, or, if no dividend is paid, the net profits, shall be credited to the Reserve Fund.

The Bank is authorized to make loans and assume guaranties "if in the opinion of the Board, credit or other financial resources would not otherwise be available on reasonable terms and conditions to a person engaged in or about to engage in an industrial enterprise in Canada" and, if in the opinion of the Board the amount of capital invested by the owner in the enterprise, or in case of a corporation, the amount of capital stock purchased by others than the Bank is sufficient to afford the Bank reasonable protection, the Bank may

- (a) lend or guarantee loans of money to the said person,
- (b) where the said person is a corporation, enter into underwriting agreements in respect of the whole or any part of any issue of stock, bonds or debentures of the corporation;
- (c) where the said person is a corporation, purchase or otherwise acquire with a view to resale thereof the whole or any part of any issue of stock, bonds or debentures of the corporation from the corporation or from any person with whom the Bank has entered into an underwriting agreement in respect of the said issue and may subsequently sell or otherwise dispose of the said stock, bonds or debentures.

The aggregate amount of loans or liabilities of the Bank, and of expenditures by the Bank for securities held by it, specified in the following subsection shall not at any time exceed \$15,000,000.

The aggregate amount shall include:

- (a) the amount of every loan made by the Bank on which an amount in excess of two hundred thousand dollars is owing, and
- (b) the amount of the liability of the Bank in respect of every loan guaranteed by it under which guarantee the liability of the Bank is in excess of two hundred thousand dollars, and
- (c) the amount of the liability of the Bank under every underwriting agreement under which agreement the amount of the liability of the Bank is in excess of two hundred thousand dollars, and
- (d) the amount of every expenditure by the Bank for stock, bonds or debentures held by it issued by any one corporation if the amount of the expenditure for the purchase of the said stock, bonds or debentures so held exceeds two hundred thousand dollars, and
- (e) the total amount of loans owing by any person to the Bank and of loans to the said person guaranteed by the Bank to the extent that they are so guaranteed and, where the said person is a corporation, of liabilities of the Bank under any underwriting agreements with respect to the issue of stock, bonds or debentures by the corporation and of expenditures by the Bank for stock, bonds or debentures held by it issued by the corporation, if the said total amount exceeds two hundred thousand dollars; Provided that there shall be deducted from the said total amount before including it in the said aggregate the amount of any loan, liability or expenditure included in the said aggregate under paragraph (a), (b), (c) or (d) of this subsection.

Thus the only limitation placed on the Bank's lending powers is that the total made available in individual amounts, or in several amounts to the same borrower, in excess of \$200,000 must not be more than \$15,000,000.

The Bank may accept as security for loans all the types of collateral available to the chartered banks and also real estate and chattel mortgages. There is no limitation on the duration of the loans. The Bank is prohibited from accepting deposits, except to facilitate repayment of amounts owed to the Bank, and from buying and holding securities except in connection with granting approved credits.

Questions for Study and Review

1. Name the different types of institutions that constitute the Canadian banking system.
2. Discuss the Bank of Canada from the following viewpoints
 - (a) Organization and management,
 - (b) Ownership,
 - (c) Discounts and advances,
 - (d) Investments and open market operations,
 - (e) Deposits,
 - (f) Note issue.
3. Compare the chartered banks with national banks in the United States, from the following viewpoints:
 - (a) Number and minimum capital requirements,
 - (b) Branches,
 - (c) Note issue.
4. Compare savings bank facilities in Canada with those in the United States.

Problems

1. What are the fixed charges of the Bank of Canada, if any?
2. From the statement of the Bank of Canada on page 598, list the "earning assets" and calculate the ratio of earning assets to total assets.
3. On November 30, 1944, the combined statement of the ten chartered banks of Canada showed:

Notes of Bank of Canada	\$ 139,402,552
Notes of and checks on other banks	232,443,485
Subsidiary coin held in Canada	11,469,130
Deposits with Bank of Canada	437,223,595
Demand deposits held in Canada	1,813,336,280
Savings deposits in Canada	2,343,141,318
Deposits due to Dominion and provincial governments and to banks in Canada	1,081,697,973
Deposits due abroad	677,671,344
Deposits due to banks abroad	87,917,085

- (a) Calculate the legal reserve ratio; (b) determine whether the legal reserve is deficient or in excess of requirements and to what extent.

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